THE ARCHITECT & BUILDING NEWS

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- HOSTELS-I, BY "E. & O.E."
- POST OFFICE IN ZURICH



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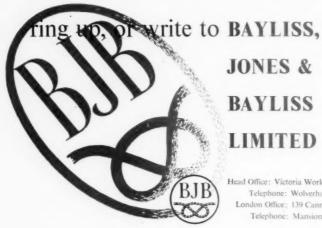
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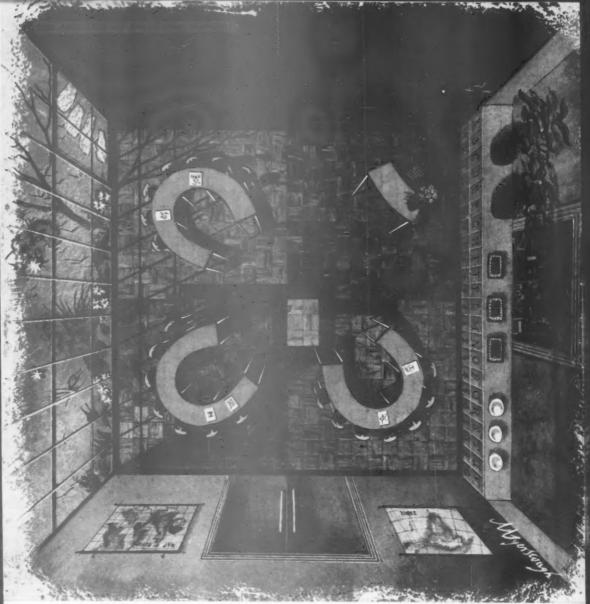
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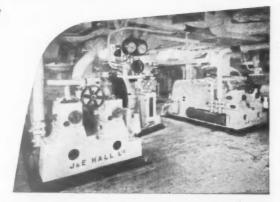


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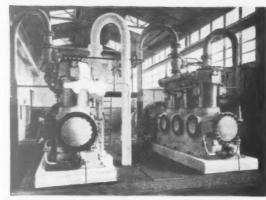
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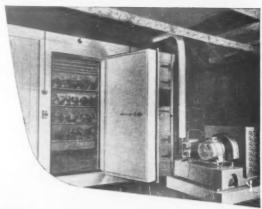
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Windows to look at...

Today, at the new Stevenage School, the windows and doors have become showpieces of skilled design and manufacture: a tribute both to the Architects, F. R. S. Yorke, F.R.I.B.A., E. Rosenberg and C. S. Mardall, A.R.I.B.A., and also to the window-makers they specified: Williams & Williams Ltd., of Chester.

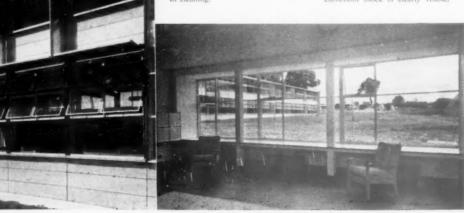
The new Stevenage school is a study in the intelligent use and manufacture of windows: they form, with their slender, graceful lines, an attractive and yet strictly economical cladding to the structural steel frame. Vast areas have been filled with glass and steel. Nevertheless on examination it will be seen that the amount of metal used is surprisingly small. The Architects planned an 8 ft. 3 ins. window module, and Williams & Williams engineers designed a series of standardised components which were assembled in different ways for each category of window in the building.

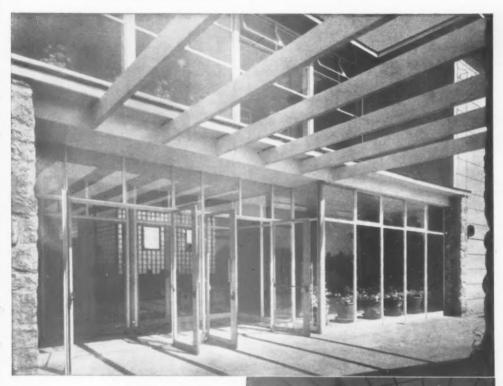
The window most generally used had a fixed light below transom and opening lights above. All the latter were interchangeable—a factor which greatly facilitated erecting and glazing. The stanchions were masked externally by uniform pressed metal cover plates and no screws or bolts were visible.

Four in one The main staircase window is composed of four 8 ft. 3 in, module units set in an opening 33 ft. 20 ft. Williams & Williams made the transoms form the bracings for the stanchions, eliminating the need for heavy-looking structural steel members. The result is a simply-styled window perfectly in keeping with the character of the building.

Windows with fins Streamlined aluminium sunshields, deflectors and cills (left) specially designed for the building by Williams & Williams form part of the windows of the special subject classrooms in the main block. The vertical fins are 12 ft. high and project 1 ft 9 ins. The horizontal deflectors which shield the ground floor windows from overhead sunshine are pivoted to raise and lower for ease of cleaning.

Staffroom with a view The light and pleasant staffroom (below) is an example of the use of Williams & Williams windows to fill wall space to advantage. The area is spanned by a range of alternating fixed and opening lights, the metalwork of which is neatly proportioned both for the sake of appearance and for economy in the use of steel. Through these windows the sunlit south elevation of the main classroom block is clearly visible.





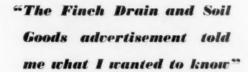
Loggia entrance The photograph above shows the main entrance to the new Stevenage School. It is a happy combination of good design and adroit use of standardised purposemade units. The metal doors are well-proportioned and in keeping with the range of sidelights to the right and also with the sunlights above. It will be seen that Williams & Williams have incorporated the structural round columns of the building in the general window design and have given special emphasis to them, using them as the main multions. Above the main entrance a series of the general windows accord naturally with the overall style of the entrance facade.

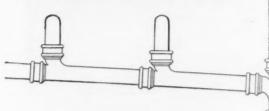


A light hall Doors and windows along the two longest sides of this hall offset the comparative lowness of the ceiling and contribute to a light and airy appearance.

One of the class rooms This classroom is typical of the new Stevenage school: the main windows on the left are of the general pattern, on the 8 ft. 3 in. module, and there are also smaller windows along the top of the right hand wall to increase the admission of daylight.

The aluminium cills and pressed retal stanchion plates and sun deflector fins at Stevenage School were so well liked that these features are now being incorporated in other schools, together with windows and doors designed and made by Williams & Williams Ltd, at the Reliance Works, Chester.





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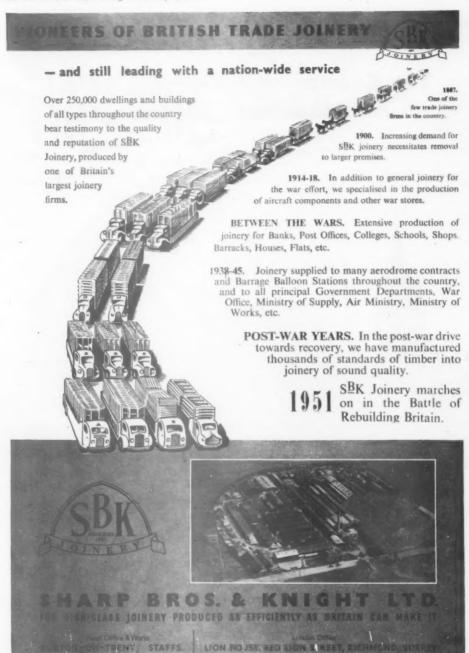
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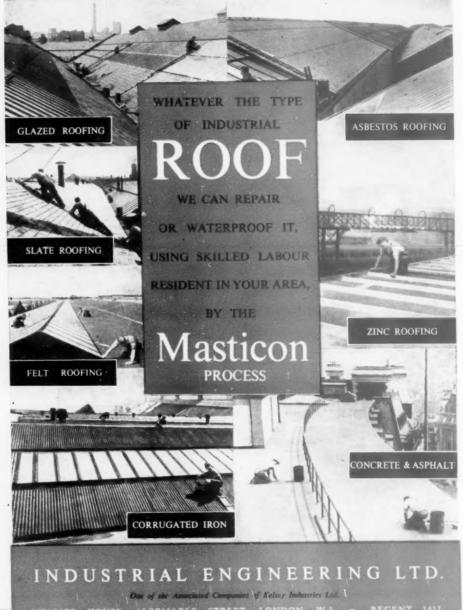
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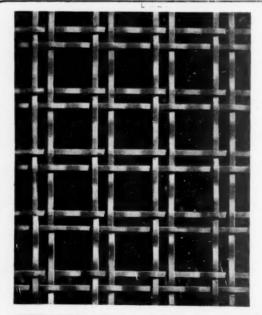
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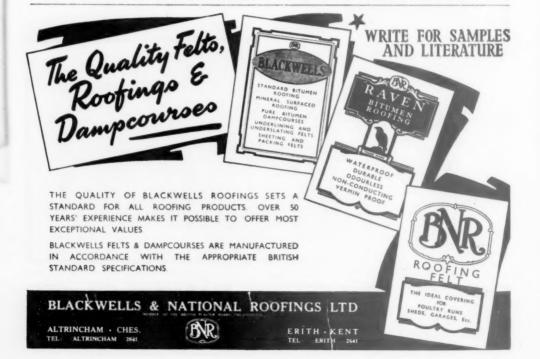
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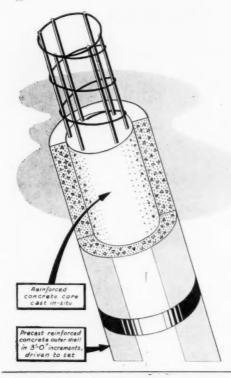


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THE CARE OF OLD BUILDINGS

In spite of rearmament programmes and the consequent curtailment of capital expenditure, preservation of the architectural works of the past is becoming increasingly stressed. There is a growing awareness of the effect the past can have on the quality and culture of today and the scientific outlook which now bears on the actual physical execution of preservation is very different from the purely antiquarian enthusiasms of the last century.

The last week or so has seen an important announcement that the Minister of Works will introduce legislation to implement the major findings of the Gowers Committee and provide ways and means whereby the great houses of the country and their contents, wherever they are of architectural and historic and, therefore, of educational importance, shall be maintained and preserved.

The same period has also witnessed the rededication of the Church of St. John in the Waterloo Road, restored after war damage as a parish church which, this year, will be known as the "Festival Church". It has been well done and the interior has fine quality, in spite of a new mural painting which is out of key and tempo.

There has also just been published a Report from the Central Council for the Care of Churches." This is an authoritative document from the body which co-ordinates the work of the Diocesan Advisory Committees throughout the country; it is also very interesting, for it reviews the work being done or recently completed (1947 to 1950) in connection with the repair and restoration of churches, whether the damage was caused by the hand of time or the violence of bombs. Two things stand out from a perusal of this Report and of the special papers which go with it; the first is the vast amount of work that is to be done if the churches and cathedrals are to be

preserved and, secondly, the smallness of the funds available for the work.

Misunderstanding is often encountered as to the status of churches under the heading of National Monuments as defined in the Town and Country Planning Act. The Ministry of Works can "list" churches but not "schedule" them, for its powers do not extend in any way to a church which is in use, nor can it contribute to the maintenance of such a church. It would therefore appear that, if the present concern about the heritage of the great houses is in earnest, then the principles of the Gowers Report should be extended to the preservation of our cathedrals and churches and of their contents. These latter buildings are often more a part of social history and communal spirit than are many of the great houses of an erstwhile aristocracy and, by that measure, is warranted a fullest contribution to sustain the legacy.

There are certain dangers in all this awakening care for aged architecture. One is that buildings and their contents may be preserved merely because they are old and without regard to their importance from the historical or artistic yardsticks. Vast amounts of money can be spent on the preservation of old buildings—if it is so spent then the buildings must be worth while. Another danger is the re-creation of biases, descending from the "restorers" of the nineteenth century, which would clear everything out and "put everything back as it was" at some arbitrarily selected date, thereby losing much intervening history and even art in the process.

In the category of church buildings, therefore, it is good to find that the Central Council is trying to establish a workable and even a compulsory system of regular inspection of churches by experts. It is also to be noted that out of a total of disused churches amounting to over four hundred rather more than a quarter are to be listed by the Council as unworthy to survive and these are to be recommended for demolition and the sites sold or given over to open spaces.

^{*(11}th Report): The Problem of England's Historic Churches: Mowbray, London, 1950, 6s. net.

Not all churches, now disused, however, merit destruction; some can be maintained as churches under some parent parish, others can be put to other and even secular uses. The latter method of ensuring preservation has been adopted in Norwich for several of its redundant city churches; one is now an Ecclesiastical Museum, well kept and arranged, another (unused for some thirty or forty years) is shortly to be repaired for the use of the Sea Scouts as a headquarters and £300 has been raised locally to carry out the essential work.

Some disused buildings (and some secular buildings too) are now ruins, having considerable value as records but too far gone for full restoration as usable buildings. Provided that the remains are properly maintained and the sites kept clean and tidy, there is

nothing against an imposing or picturesque ruin. In fact some considerations might well be given to allowing less important buildings, which would be too expensive fully to rehabilitate and if they are in a suitable location, to become "ornamental" ruins.

Full preservation should be given only to the best or the most important; the real crux of the matter is that there should be competent judgement in these things and it is essential that such judgement should be nationally comprehensive, to the end that redundancy and duplication can be reduced to a minimum, especially in times when money is so short. It may be better to preserve and endow thoroughly one good thing than to spend small sums on all and sundry in a temporary manner, a process which, in turn, would mean continuous future expenditure.



The Interior of St. John's, Waterloo Road, the Festival Church



This week's event is the Dedication and Opening by H.M. The King of the Royal Festival Hall.

EVENTS AND COMMENTS

NEW TOWNS AT THE A.A.

THE A.A. had a most distinguished guest list at its general meeting last week. The speaker was Professor William Holford, and the subject "New Towns in England and New England." Professor Holford's paper will, I understand, be published in "Points from Papers" next week. The vote of thanks should have been proposed by Mr. Hugh Dalton, Minister of Local Government and Planning, but as he had to return to the House by nine o'clock, he spoke before Professor Holford.

The paper was excellently well rounded and delivered, and was one of the best heard at the A.A. for some time. The vote of thanks was proposed by Dame Evelyn Sharp, who had a crack at architects, and very nearly, but not quite, brought the talk round to kitchen planning. Sir Patrick Abercrombie, in his own inimitable way, seconded the vote of thanks. Oh, how I hope that I am as lively and full of fresh ideas when, if ever, I am his age. Sir George Pepler and Mr. Henry Chisholm, Chairman of Corby Development Corporation, also spoke, the latter making the point that the cheapest way to build houses was to build them now, and quickly, because while everyone was arguing about the best and cheapest way to build, prices were steadily rising.

Mr. Dalton's speech at the beginning of the proceedings was full of wit, and in its more serious moments showed him to be a champion of modern architecture.

FESTIVAL HALL PRIVATE VIEW

ON Thursday I toured the Royal Festival Hall with Mr. Robert Matthew, the Architect to the L.C.C., and Peter Moro, one of his principal assistants. Apart from the hordes of floor polishers, caterers and general tidier-uppers, who were everywhere busy as bees, the job is finished and ready. What a splendid building it is. If the food in the restaurant is as good as the general setting and view, I shall be a frequent customer.

I had not seen the auditorium from the balcony

I had not seen the auditorium from the balcony before, and found the view even more impressive than it is from the stalls. As I have not yet learned my way around, I cannot tell you exactly where there is a particularly fine meeting room for small concerts or lectures. From the roof the view of St. Paul's will be perfect when they have pulled down a tall chimney beyond the Shot Tower. The caretaker, lucky man, has his quarters at this level, and his living room window is a large sheet of plate glass. He is said to be very appreciative of the view, but I hear that his lampshades, seen from the Festival site below, have been criticised.

After completing my tour with Mr. Matthew I fell in with Mr. Coe and Mr. Davies, of the heating branch of the L.C.C. Architect's Department. I confess that I did not know that such a branch existed. It has, however, been responsible for the actual installation of heating and ventilating plant in the hall. The air conditioning machinery, packed in somewhere near the top

of the auditorium, is vast, but astonishingly silent in operation. As usual, the engineers say that they were not given nearly enough room, but they seem to have managed all the same. There are two identical sets of plant, both of which work all the time at reduced speed. One set could, however, cope with the load in an emergency. From the roof to the basement is a fair drop, particularly if the boiler room is approached by the spiral escape stair. Hot water for the radiators and other heating devices in the building is provided by six gas boilers, each having a capacity of six million B.T.U.s. They are unlike any other type of gas boiler I have seen and resemble the smaller type of vat seen in brew-The boiler room and adjoining control room are models of what such things should be, but here again the engineers are muttering because it is quite impossible to take a decent photograph of the installation. One of the things I liked best about the control room was the instrument which allowed the temperature of various parts of the building to be read on a dial at the mere pressing of a button. No doubt a fully technical description of all the services will appear soon, and then you will hear of the part that the exhibition heat-pump is to play in heating and cooling the building.

The kitchens are splendid and, as someone remarked, should be capable of dealing with an order for a couple of poached eggs satisfactorily. All cooking is by gas. As we left the subterranean world of wine cellars and cold rooms, I was tempted to stop off and have some of the excellent lunch being enjoyed in the staff canteen. Finishing my tour even more impressed than on my first visit, I reflected that there were enough details and ideas in it to keep Colin Westwood at work photographing for the next ten years. It is a great

building.

Outside once more, I passed a group of distinguished sculptors patting each other on the back while surveying a couple of seated figures whose title should be, if it is not already so named, "What is a brassère?" At the gate I was severely lectured by an official for trying to get out of the exhibition that way. Utterly cowed, for I am a law-abiding citizen, I turned back and was then roundly abused for not proceeding as I had originally intended.

NEWS FROM THE ZOO

THE Zoo is not doing nothing about its architecture. In fact, it has an official architect, Mr. F. A. P. Stengelhofen. He is, I hear, preparing a scheme for the reconstruction of the Regents Park Exhibition. new scheme incorporates two-storied animal storage because the site is cramped and cannot be extended. An extraordinary feature of the proceedings is that the R.Z.S. hold a yearly tenancy with the Crown with six months' notice of termination on either side. Not, I should have said, very encouraging for builders of permanent buildings. There seem to be various complicated and slightly embarrassing reasons for the Society's neglect of the buildings I mentioned a few weeks ago. For example, the penguin pool is said to become too warm for penguin comfort. The animal studio, though ideal for artists, is not popular with animals who prefer to sit at home. Precisely why all these things were not thought of at the outset I do not know, but it just shows that the designing of Zoos is a complicated affair.

NEW HOUSES

A N agent tells me that Powell and Moya are building a pair of houses near Swindon on a new system by which they hope to make a substantial saving over nor-



The upper-level Restaurant in the R.F.H. overlooking the riverside terrace. The furniture has been specially designed by Robin Day. The carpet has a white pattern with grey spots on a green-grey background.

mal methods. I understand that floors and roof are carried on load-bearing end walls. Non-load-bearing external walls consist of window and wood wool slab rendered outside and plastered in. Wires which hold the slabs in position and also reinforce the plaster and rendering, seem to take care of moisture movement, just how I do not know. You shall hear more of this another day.

EXHIBITIONS-THE BEGINNING OF THE MARATHON

THIS week has seen exhibitions opening almost hourly and it has been quite impossible to see everything, let alone on private view day. First on the list is "The Great Exhibition of 1851" at the V. & A. This consists of an astonishing collection of drawings, paintings, models, etc., and correspondence dealing with the Crysstal Palace, with a wide selection of objects actually shown in 1851. In addition there are exhibition souvenirs of all kinds. The exhibits range from twelve pairs of mechanically perfect scissors balanced against half a grain to Queen Victoria's jewel casket, which must weigh about a quarter of a ton. Some of the things are monstrous, but many are not, and all display excellent workmanship. I was most interested in a steam-operated machine gun—range not stated—and an expanding circular dining table.

Among the correspondence is a rather pathetic letter from a woman in London for the Great Exhibition, staying in bad but expensive lodgings and longing to go home, in spite of the ten tunnels to be traversed on the way.

Cartoons and caricatures are too numerous to examine at one visit, but I noticed among the children's books The House That Paxton Built—

"This is the Queen upon whose royal head May the choicest of gifts be by providence shed, Along with Prince Albert, whose zest and position Gave vigour and strength to the Great Exhibition. For which Mr. Paxton, remarkable man! Built the bright Crystal Palace, and thought of the plan To do without bricks, and make it of glass, In these wonderful times what strange things come to pass."

I wonder whether anyone will write about the Dome that Tubbs Built? An idea for a competition!

M. Soyer, later famous as chef at the Reform Club, for inventing the Soyer stove and for revolutionising the cooking in the Crimea, took a house in Kensington Gore and installed what, in his delightful handout, is called "a gigantic dining encampment for 1.500," where dinners could be eaten at prices ranging from two shillings to six and sixpence, and where the tablecloth was 110 yards in length.

There is much more besides all this. It is an exhilarating show. Go and see it. Among other exhibitions to be visited this week are the Exhibition of Exhibitions at the R.S.A., the R.A., and one called the South Bank.

HA HA! JOLLY FUNNY!

MIY picture shows Cremlin Grange from Lansbury, or how not to build a house. I am disappointed because when I first heard of the idea I thought that it was going to be treated seriously. I think that a lot of visitors will like this house and I would not be surprised if offers were received for it when the exhibition is over. It would make a capital façade to a railway carriage shack.

VICTORIAN PHOTOGRAPHS

MEARBY also in the V. & A. is an exhibition of "Masterpieces of Victorian Photography" arranged by the Arts Council. You should certainly see this too. I am no professional judge of photographs and so cannot understand why they all look so much better than anything one sees now. I suppose it is because I look at the subjects and not the technique and that may be the trouble with modern photography. I find the pictures of the Crimean War particularly fascinating and those of street and indoor scenes only slightly less so. The serenity of the portraits is another remarkable quality which is echoed throughout the exhibition.

A.A. PRESIDENT

MR. Anthony Chitty is to be President of the A.A. for the session 1951-2. Chitty is a distinguished architect and town planner who, in addition to sharing a large practice with Mr. Robert Hening, manages to find time to lecture for the British Council and travel extensively in foreign parts. Since the war he has visited Turkey, Greece, Yugoslavia, Italy, South Africa, Bermuda and the United States. During the war he was architect in charge of the aircraft production factory department of the M.o.A.P. He has for some time been a member of the Board of Architectural Education, and is now its Vice-Chairman. He is one of the two U.K. delegates to the next U.I.A. conference in Morocco. Like a number of other architects, he is a Rolls-Royce enthusiast and owns and personally maintains a veteran model.

FESTIVAL SOUVENIRS

YOU can buy a washable plaster bust of Queen Victoria at the V. & A. for 25s.

ABNER



Gremlin Grange, Lansbury.

N E W $\mathbf{0}$ \mathbf{F} T H E WEE

The Royal Society of Arts has offered the Albert Medal for 1951 to H.M. The King, who yesterday opened the Festival of Britain and the Royal Festival Hall.

The New President of the A.A.

Mr. Anthony M. Chitty, M.A., F.R.I.B.A., A.M.T.P.I., A.A.DIPL., has been appointed President of the Architectural Association for its 105th Session com-mencing June 1, 1951.

Edinburgh A.A. Officers

The following office-bearers of the Edinburgh Architectural Association have been appointed for the Session 1951-52.

President: W. H. Kininmonth, F.R.I.B.A.; Past President: Leslie Grahame-Thomson, R.S.A., F.R.I.B.A.; Vice-Presidents: Esme Gordon, A.R.I.B.A., and Frank Wood, F.R.I.B.A.

Members of Council: A. G. Forgie,
A.R.I.B.A.; Innes Thomson, F.R.I.B.A.;
I. V. G. H. Warner, L.R.I.B.A.; C. W.
Gray, L.R.I.B.A.; Harry Hubbard, I. V. G. H. Warner, L.R.I.B.A., C. W. Gray, L.R.I.B.A., Harry Hubbard, A.R.I.B.A.; James J. Gordon, L.R.I.B.A.; George L. H. Walls, F.R.I.A.S.; J. Eversdon Henderson, A.R.I.B.A.; R. F. Thomson, F.R.I.A.S.; Ian G. Lindsay, F.R.I.B.A.; D. D. Jack, F.R.I.B.A., and J. Wilson Paterson, A.R.I.B.A. Messrs. Kininmonth, Warner Innes, Thomson, Forgie Wood Hubbard and George Forgie Wood Hubbard and George Forgie, Wood Hubbard and George Lawrence, A.R.I.B.A., and Miss A. M. Bayne, A.R.I.B.A., were appointed as the Chapter representatives to the Council of the Royal Incorporation of Architects in Scotland.

Housing Medal 1951 Awards

The 1951 awards of housing medals and diplomas offered by the Minister of Local Government and Planning for the best designed local authority urban and rural housing estates, in England and Wales, have now been completed on the recommendations of the Re-Awards Committees. annual awards, made for the first time last year with the support of the R.I.B.A., aim to encourage a high standard of house design and estate planning, and to recognise outstanding examples This year there were entries from New Towns and from housing associations, in addition to local authorities.

The 1951 awards were chosen from 358 schemes completed during 1950, an entry which shows the increasing interest which is being taken in the awards by local authorities and architects. Last year's awards were given for all postwar building schemes completed in the four years ending in 1949, and there were some 450 entries.

The medal recognises the work of the architect or designer responsible for the design of the estate selected in each case, and is awarded individually to that person, who also receives a dip-loma signed by the Minister and by the Chairman of the Awards Committee. A similar diploma is presented to the local authority concerned. In judging the entries the Awards Committee have taken into account the layout and appearance of the estates and the architectural quality and internal planning of the houses.

The Minister will, at the invitation of the President and the Council of the R.I.B.A., present the medals and diplomas at the Royal Institute in June.

The awards are as follows: NORTHERN AREA

Garth Cottages for Hexham U.D.C.; architect: James W. Hanson, Jr., L.R.I.B.A., Newcastle-on-Tyne. Milnthorpe for S. Westmorland

Milnthorpe for S. Westmorland R.D.C.; architect: Edgar Middleton and Thomas Maldwyn Jones, Lancaster. E. & W. RIDING

West Hill Estate, for Bridlington C. Clifford E. Cuplin, F.R.I.B.A., for Bridlington

Highfields, Aberford, for Tadcaster R.D.C. Anthony J. Steel, A.R.I.B.A.,

NORTH MIDLAND

Hartsholme Estate, for Lincoln C.B.C. Patrick F. Burridge, F.R.I.B.A., Lincoln. EASTERN

Adevfield Neighbourhood Unit, Hemel Hempstead Development Corporation. Herbert H. Ablett, F.R.I.B.A. Parkfields, Roydon, for Epping R.D.C.

Robert O. Foster, A.R.I.B.A., Buckhurst

LONDON AREA

The Grove, for Esher U.D.C. George

Blair Imrie, F.R.I.B.A., Bristol.

Amwell Court for Stoke Newington

M.B.C. James F. Howes and Frank L. Jackman, FF.R.I.B.A., Grays Inn.

Stanmore Estate, for Winchester City Council. Harold and Peter Sawyer,

FAR.L.B.A., Winchester, in association with Mort & Howard.

Sheepcote Dell, Holmer Green, for Amersham R.D.C. John F. Watkins, L.R.I.B.A., High Wycombe.

SOUTH-WESTERN AREA Porth Cressa, for Council of the Isles of Scilly. Ailwyn G. Baseley, A.R.I.B.A., Penzance.

The Orchard, Kilmington, for Axminster R.D.C. Frederick S. Kett, L.R.I.B.A. Axminster.

MIDLAND AREA

Burton House Estate, Stafford, for Kingsway Housing Association. Ernest Norris, F.R.I.B.A., Stafford.
Ullenhall, for Stratford R.D.C. Francis

W. B. Yorke, F.R.I.B.A., Edgbaston. NORTH-WESTERN AREA

Memorial Scheme, Church Road, Lytham St. Annes, for Lytham St. Annes War Memorial Housing Associa-tion. Tom Mellor, A.R.I.B.A., Lytham St. Annes.

SOUTH-EASTERN AREA Box's Nursery, Lindfield, for Cuckfield U.D.C. John L. Denman, F.R.I.B.A.

Brighton.

Seale Village, for Guildford R.D.C.

John W. Wilton, Surveyor to Guildford
R.D.C., and A. J. Horsfield, A.R.I.B.A.,

Shalford.

WALES Gaer-Stelvio Neighbourhood Unit, for Newport C.B.C. Johnson F.R.I.B.A., Borough Architect. Johnson Blackett,

Llandinan, for Newton and Llanidloes D.C. John B. Cooper, F.R.I.B.A., R.D.C. Birmingham.

The West Riding Education Committee at Wakefield has approved the purchase of 5,482 acres of land on which it is proposed to build a new School of Art at Harrogate.

On April 27, the occasion of the handing over of the 1,000th post-war house, was marked by a civic ceremony. The house was one of the 380 built by Messrs. Wates Ltd., and was of the prefabricated type similar to the one exhibited by that firm at the Daily Mail Ideal Home Exhibition this year. *

Hull Corporation Town Planning Committee have unanimously approved the reconstruction plan for the city estimated to cost £131 million over 20 years. The plan was prepared by V. A. Coates, the Town Planning

The Farm and Factory Exhibition at Castlereagh, Belfast, which will be visited by the King and Queen on June 1—the opening day—and will continue until the end of August, is rapidly approaching the final stages of

rapidly approaching the final stages of construction and staging.

The Ministries of Agriculture and Commerce are jointly responsible for the exhibition. Mr. W. M. de Majo, of London, is the Co-ordinating Designer and Mr. H. Lynch-Robinson, of Belfast, is the Designer of the outdoor agriculture features.

ANNOUNCEMENT Mr. Percy Gray, partner of the late Arnold F. Hooper, T.D., O.B.E., F.R.I.B.A., F.R.I.C.S., of the firm of Hooper, Belfrage & Gray, wishes to announce that the practice will continue as hitherto under the same name and at the same address: Norfolk House, Norfolk Street,

OBITUARY The death has been announced of Mr. Arnold F. Hooper, T.D., O.B.E., F.R.I.B.A., F.R.I.C.S., senior partner in the firm of Hooper, Belfrage & Gray, on April 20.

The death was announced on April 25 of Ernest F.R.I.B.A., F.R.I. Ernest James Thomas, F.R.I.C.S., M.I.Struct.E., of Alverstoke.

COMING EVENTS

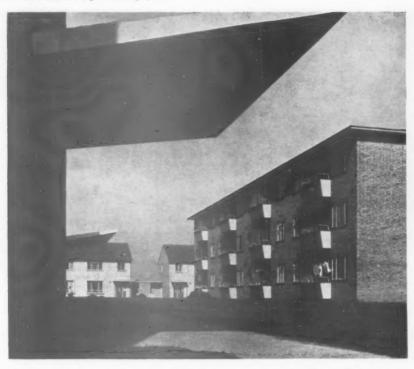
Royal Institution of Chartered Surveyors May 7, at 5.30 p.m. Ordinary General Meeting. "Mineral Valuations under the Town and Country Planning Act, 1947." Speaker: J. D. Trustram Eve. British Colour Council

• May 7-11. 5th Designers' Conference.

Sculpture in the Open Air

 May 7, 3 p.m. Opening by H.R.H. The Duchess of Kent, of the Second International Exhibition of Sculpture in Battersea Park. M.B.A.

• May 9, at 12.45 p.m. Central Area No. 1. Luncheon and General Meet-ing at Derry & Toms Restaurant, W.8.



One of the blocks of flats and houses for Dagenham Borough Council designed by Norman & Dawbarn

Housing Standards

The Minister of Local Government and Planning has sent a circular (No. 38/51) to all local housing authorities in England and Wales. The circular deals with the design of houses, and says:

says:

"In the Minister's view it would be wrong to approach this problem by fixing a maximum cost for each house and then forcing down the standards of accommodation and amenity to fit some arbitrary figure of total cost. Minimum standards must continue to be laid down for all houses to be built by Local Authorities and the Minister desires to make it clear that he will not accept any reduction in the standards laid down in the Housing Manuals for the size of individual rooms and for total living space.

space.
"But many able architects have shown that it is possible by skilled planning to maintain these standards within a smaller total superficial area than 900 ft. for a three-bedroom house for 5 persons or 750 ft. for a two-bedroom house for 4 persons. The Minister has now, therefore, decided to leave it to the discretion of Local Authorities to dispense with the minimum requirements of 900 ft. super for a three-bedroom house for 5 persons (or of 750 ft. for a two-bedroom house for 4 persons), provided that the sizes of the individual rooms and the total amounts of living

space do not fall below the present standards which, for convenience, are reproduced in the Appendix to this Circular. The general planning of the houses must, of course, accord with modern requirements of comfort and amenity, and there must be no reversion to the kind of pre-war plans which the better building experience of the last five years has shown to be unworthy and obsolete.

"The Minister has also decided to leave it to the discretion of each Local Authority to decide whether or not to provide a second w.c. for houses with three bedrooms: where only one w.c. is provided this should be in a separate compartment from the bathroom, but

is provided this should be in a separate compartment from the bathroom, but may be on either floor.

"Local Authorities have often been urged by this Department to employ qualified technical officers on housing work. The Minister attaches great importance to this, especially if, as a result of this Circular, new plans are being made.

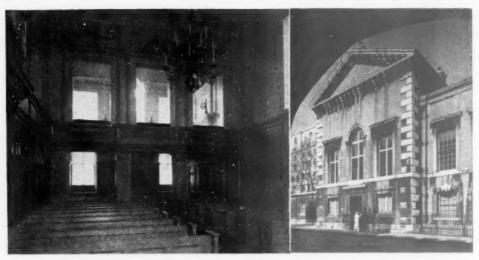
being made.

"Such plans, if prepared by a qualified architect, provided they comply with the conditions in this Circular, will not, in pursuance of paragraph 13 of the Appendix to the Circular of February 10, 1950 (Circular 24/40), require to be submitted for approval to this Department. But the Department will, of course, always be ready to give advice or assistance to Local Authorities, and it may be helpful if architects, when

preparing plans designed to take advantage of the wider discretion now given to them, show these at the sketch stage to his Regional Officers.

"A variation in the planning has been suggested by a number of Local Authorities for some of the houses intended for occupation by four persons. The normal two-bedroom house for four persons contains two double bedrooms of a minimum size of 135 sq. ft. and 110 sq. ft. respectively. In order to provide for sex separation in families where there are two older children a number of Local Authorities have expressed the desire to build a proportion of three-bedroomed houses for four persons containing one double and two single bedrooms. This variation has the advantage of providing for families who would be inappropriately housed in the normal two-bedroomed house and for whom a three-bedroomed five-person house would be too large.

"The Minister is willing to leave it to the discretion of individual Local Authorities to provide a reasonable proportion of such houses. In order to avoid the danger of overcrowding the Local Authority should carefully ensure that such houses are not occupied by more than four persons. The size of single bedrooms should be within the range of 70-80 sq. ft. to make clear that they are intended for occupation by one person only."



The Queen's Chapel, Marlborough House, by Inigo Jones, has now been restored after being damaged by blast in 1941. Marlborough House is the official London residence of H.M. Queen Mary

C O R R E S P O N D E N C E

Voice from Hong Kong

To the Editor of A. & B.N.

Sir,—I see that Abner credits us with thinking that architectural papers in London are superficial and provincial, and says that we therefore prefer the American journals. We think London journals, like London policemen, are wonderful.

The point which we do notice however is that American journals illustrate more designs for buildings in subtropical and tropical climates. These are usually backed up by a good deal of information about building technique. Naturally such information is of great interest to designers in countries which have somewhat similar climatic conditions. London papers, which publish this type of work less frequently, tend to give good pictures with little description of building technique. I doubt whether such a course is completely justifiable when British architects are doing large building schemes in West and East Africa, Malaya, India and South East Asia. As for being provincial—well! One must poke fun at all this Bloomsbury news sometimes.

GORDON BROWN.
(Professor)

Modular Dimensions

To the Editor of A. & B.N.

Sir,—Reading through the learned pages and correspondence recently published about the search for the perfectly co-ordinated module, I have felt that mixture of fascination and frustration that goes with the quest for perpetual motion.

A gleam of hope breaks, when the shoulders of the modulated man march confidently through door openings, passages, and into w.c.s; but a lurking doubt persists at the thought that the same shoulders are expected to force their way through the roof, the walls, and out of the windows, dictating dimensions as they go.

I can't help being reminded also of

I can't help being reminded also of the attempts that have recently been made in the musical field across the curtain at dictating co-ordinated modulation

I am, etc., JOHN LACEY.

Electric Floor Heating

To the Editor of A. & B.N.
Sir,—I note with interest the remarks
of Mr. E. M. Ackery in your issue of
April 6, and are pleased to learn his
views on electric space heating.

Critics of such a heating method are no doubt numerous, but if the full facts are considered, then perhaps a truer perspective may be obtained.

Firstly, the writer will agree that the overall efficiency of producing electricity is not has high as say, a solid fuelired boiler working at its optimumbut for how long does this optimum period last?

If the module is too big, it will dragoon the designers; if too small, it is unnecessary anyway. The elusive dividing line must be found.

Also, the controls inherent with, say, an Electrode Water Heater or Boiler are immediately responsive to the slightest change in demand, and do not have the time lag as with solid fuelfired boilers.

Secondly, it might be argued that in these days of power shortages, it would be unwise to take energy from the national grid for space heating purposes when it is urgently required for our production programmes. This again constitutes no real criticism since buildings of a medium or large nature would usually employ the Thermal Storage principle—taking electrical energy only during the off-peak hours, filling in the power valleys on the grid, and thereby decreasing the total generation costs with the consequent increase in overall efficiency.

Thirdly, surely coal supply is not the only consideration in the national set-up. What about wasted man hours associated with solid fuel boilers, and in addition, what about the wasted material and man hours used to clean up our cities as the result of stacks and flues belching smoke, etc.

Lastly, considering the above, then there is a case for electrical heating, regardless of the type of building to be heated. It appears to the writer that the only real consideration is the method of heat distribution within the building, and this will vary with respect to the type of structure of building to be considered.

I am, etc., R. D. Northcote.

From Monday, May 7, the Patent Office Library at 25 Southampton Buildings, Chancery Lane, London, W.C.2, will be open to the public from 10 a.m. until 9 p.m., Mondays to Fridays inclusive, instead of closing at 6 p.m. as at present. Saturday opening, however, will continue to be from 10 a.m. to 5 p.m.

Dr. THOMAS SHARP'S REPLANTING SCHEME FOR ST. JOHN'S COLLEGE, CAMBRIDGE

Over the last few decades the College grounds (which occupy some 40 acres at the northern end of The Backs) have suffered severely from the loss of trees by decay, storm damage and elm disease. In the last year or two it has become clear to the College that if the beauty of this part of the Backs is to be preserved for future generations it cannot be done merely by keeping diseased and mutilated trees standing till they fall down and then planting new trees in their places; it can only be done by undertaking a comprehensive replanting scheme.

Having come to this decision, the College engaged Dr. Thomas Sharp, President of the Institute of Landscape Architects, to advise on what should be done and to draw up plans. On his advice a survey was first made of the grounds and a report obtained on all the trees which still remain in the grounds. It was clear-from this survey that there were many trees so diseased that they might fall or be blown down at any time, and that these trees should be felled. They included most of those in the remains of the avenue leading to Queen's Road and in the continuation of the avenue in the playing fields on the west side of the road.

Work on Dr. Sharp's scheme is now about to begin.

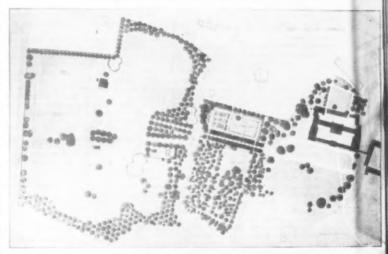
There will be little alteration to the grounds along the side of the river and in front of New Court: a few trees must be removed and some new trees will be planted.

In the ground at the back of New Court, now an orchard, where many poor spindly trees grow along the stream, making a heavy screen immediately in front of the windows of the new Magdalene building, the orchard and the screening trees will be felled and a new lawn garden made.

In place of the former elm avenue leading to Queen's Road gate a new avenue of limes will be planted. Behind each line of trees a trimmed yew hedge will give both additonal definition to the new avenue and privacy to the gardens on either side. In the present Fellows' Garden, the Wilderness, on the south side, only work necessary for the rehabilitation of its essential character will be undertaken: a few new trees will be planted to replace the comparatively few trees to be felled, and these will be of light-leafed species so that the flowering season on the woodland floor may be extended by adding new suitable plants to the present succession—aconites, wild daffodils, anemones and bluebells, and martagon lilies.

The ground on the north side of the avenue is at present open orchard. Here a new Garden will be made, at once complementary to the Wilderness and in contrast with its informality. This garden has been designed so that little maintenance will be necessary: and the





The top picture shows the present layout and planting in the grounds of St. John's, Cambridge, the lower picture the design for replanning and replanting by Dr. Thomas Sharp, P.I.L.A.

planting (which has been specially devised by Miss Sylvia Crowe) will chiefly be of a great variety of flowering

The grounds on the west side of Queen's Road, which are the College playing fields, have never been land-scaped as a whole. They consist of several railed-in enclosures cut across by an old driftway. The groundsman's house and garden obtrude into the open area; and the continuation of the avenue from the main grounds on the other side of Queen's Road, though it forms a very striking feature from those grounds, has an unsatisfactory effect within the playing fields them-

selves since it is unsupported by adjacent planting and looks artificial and somewhat incongruous. In short the landsscape here is hardly organised at all, and the problem is one of redesign more than of rehabilitation.

The new plan provides that all the interior fences should be removed and the present sub-divisions united in a landscape that will "flow" through the various parts, and at some future time the groundsman's house will be removed from its near-central position. The replanted avenue will be backed by new planting so that it will be a cut between a bank of trees instead of an artificially imposed feature. Some

fairly heavy planting will be undertaken on the boundaries for the purpose of landscape enclosure: and occasional groups of trees or single-standing trees (their positions determined partly changed layout for the playing pitches) will be planted in the interior space to

create a parkland effect.

The main trees to be planted will be lime, horse-chestnut, tulip trees and balsam and black Italian poplar with some hornbeam, beech, sycamore, plane and ash, and an occasional ilex or other special type for special purposes. minimise the period before the maturing of the new landscape, the new trees planted will be of as great height as is consistent with their probable survival -15 to 17 ft. for the avenue limes, and 10 to 12 ft. for the remainder, except such species as the tulip trees which need to be planted much smaller. A comparatively small part of the work (contingent on the removal of the groundsman's house) will be deferred for a few years: but for the rest the fellings will begin almost at once and should be completed by the end of June this year; while the new work in planting and making additional gardens should be completed by the end of April 1952.

IN PARLIAMENT

Aid for Historic Houses

THE Government's decisions on the recommendations of the Gowers Committee on the preservation of historic houses were announced to Parliament on April 26. In brief, the Govern-ment reject the idea that there should be special exemptions from taxation for the owners and occupiers of specified houses because this would amount to a subsidy to a special class of persons, and Par-liament would have no direct control over it. Legislation is to be introduced next session authorising the Minister of Works and the Secretary of State for Scotland to carry out preservation work, or to make loans or grants-on condi-tions; and in the current Finance Bill there are to be alterations to estate duty to make it easier for houses and their contents to be transferred or bequeathed to public ownership.

The Government agree that many of the country houses of Great Britain are important national assets of substantial aesthetic, historic and educational value; and that if this part of the national heritage is not to be lost for ever the State must accept some further respon-They acknowledge that much is being done under existing powers, and in particular by the work of the advisory committee under the chairmanship of Sir Eric Maclagan, but observe that these powers are all negative: they prevent harm being done, but they do not provide for positive action where owners or occupiers of houses of value cannot maintain them, Having rejected the taxation proposals which Gowers Committee, the Government state that they prefer, instead, that any action taken by the State should be positive in character and under full

Parliamentary control.

Ministerial Responsibility We therefore propose (the statement continues) to introduce legislation next session to empower the Minister of Works to assist in the preservation of outstanding houses. This is the most appropriate Minister for the purpose, since he already has comparable respon-sibilities in relation to Royal Palaces and to ancient monuments, and employs an expert staff for this purpose. A separate Bill will be required for Scotland, where the responsibility will be shared with the Secretary of State. Details of these proposals will be announced at a later date.

These Ministers will be empowered. provided certain conditions are fulfilled by the occupier, to do work themselves or make loans or grants in order to preserve the structure of these houses. They will work in close collaboration with local authorities and with the National Trusts, which are doing such admirable work in this field. Among the conditions will be undertakings by the owner to maintain the house properly and to make it accessible to the public as may be prescribed.

Limited Funds

The burden of defence and the existing financial situation make it impossible for us to contemplate spending more than a very small sum on this work for the present, and therefore the number of houses in respect of which work can be done will be equally limited. But the machinery will be set up and, as conditions allow, it will be possible for more to be done later. The Minister of Local Government and Planning thinks it will be appropriate that the National Land Fund set up under the Finance Act, 1946, should be used to meet the cost of any houses and their contents that are to be acquired.

We also propose that the present provisions for taking over land and houses in payment of estate duty and for reimbursing the Commissioners of Inland Revenue out of the National Land Fund should be expended so as to enable chattels to be taken over in the same way, when they are ordinarily kept in houses so taken over or already in the possession of the Crown or the National Trusts. This facility will, we hope, Trusts. This facility will, we hope, make it easier for houses to be preserved with their contents intact.

Advisory Councils

The Government have carefully considered the committee's proposal that historic buildings councils should be created with executive powers, but are unable to accept it. It is our view that normal Ministerial responsibility and Parliamentary control of expenditure must be maintained in this field. There is however a strong case for advisor councils to assist the Ministers in this work, and the legislation which we propose to introduce will provide for the setting up of such councils with wide terms of reference.

Since it is intended that the Minister of Works should exercise these new responsibilities, the Minister of Local Government and Planning has agreed that the Bill should transfer to that Minister the powers at present exercised by himself, in relation to buildings of special historic or architectural interest, under the provisions of the Town and Country Planning Act, 1947.

It is plainly convenient that the two sets of powers, for negative preservation and for positive assistance, should be exercised together, and that the powers relating to historic buildings should be brought together with those relating to ancient monuments. Corresponding, but rather different powers will be required for Scotland, where the respon-sibility will be shared with the Secretary

Easier Transfer

The provisions so far mentioned will have to await future legislation. But the Chancellor of the Exchequer poses to take the opportunity of the Finance Bill to make certain changes in regard to Estate Duty which bear upon this question. Their intention is to make it easier for noteworthy houses and their contents to be transferred or bequeathed to the Government, National Trusts, or other public bodies. Such transfer is one of the best ways of securing their preservation, and, as the experience of the National Trust shows, wholly compatible with private occupation, where this seems desirable. He proposes to provide for the exemption from Estate duty of the contents of houses given or bequeathed to the Government, the National Trusts, or other public bodies; and the exemption of gifts or bequests to public bodies of houses and land and of endowment funds accompanying them (an exemption which already applies to similar gifts and bequests in favour of the National Trusts).

We hope that these proposals taken as a whole, will help us to preserve for the benefit of future generations this valuable part of our national heritage.

Art and Advice

Some documents-unspecified in the uestion-have been sent Driberg to the Prime Minister dealing with "the generally unsatisfactory rewith "the generally unsatisfactory results" of the findings given on architectural matters by the Royal Fine Art Commission. Mr. Driberg asked on April 25 if these had been considered, and if the Prime Minister thought that the terms of reference of the commission needed amendment to secure some improvement. Mr. Ede, the Home Secretary, who replied, stated that the Prime Minister had read the article referred to. It expressed disagreement with the advice given to the Government and other public authorities on a number of recent occasions by the Royal Fine Art Commission. The Royal Fine Art Commission. The Prime Minister did not consider that any change in either the powers or the terms of reference of the commission was likely to prevent some critics from disagreeing in the future, as they had done in the past, with the advice which it gave.

(From Our Parliamentary Correspondent)

CORRECTIONS

On our Detail Sheet A 123, Messrs. Ove Arup & Partners were described as "Architects." They are of course They are of course Consulting Engineers.

in last week's issue we regret that Mrs. Cecil C. Handisyde's name was

incorrectly spelt.

The caption on p. 478 should read detail of column and strut to ground floor frame in 3 storey factory.

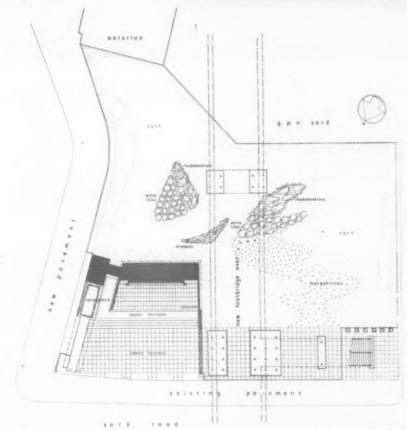
SOUTH BANK EXHIBITION BUILDINGS.I

TEMPORARY BOOKING OFFICE, ROYAL FESTIVAL HALL

architect: SERGEI KADLEIGH A.R.I.B.A.

Visually the site is dominated by the Brewery Lion which His Majesty The King requested should be given a place on the Festival site. The Lion is painted Indian red.





Layout of the site with the booking office shown solid black

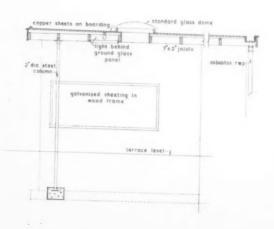


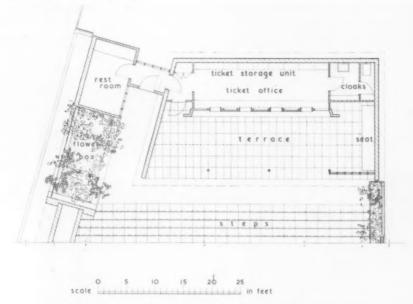
metal ponel wood railer shutter shutter and drawer sliding ticket container than the container similar to above the containe

The booking office front from York Road. Left is a detail of the ticket storage unit and below is a section through the roof of the booking office, scale: $\frac{1}{4}$ ° =1 ft.

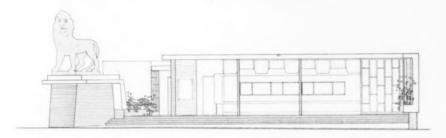
architect:

SERGEI KADLEIGH. A.R.I.B.A.





Plans of the booking office and elevation facing York Road. Scale $1/12^{\prime\prime}=1$ ft.



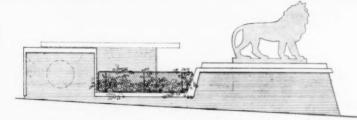
THE Temporary Booking Office for the Royal Festival Hall is part of the scheme of street decorations for the Festival of Britain, the Co-ordinating Designer for which is Jack Howe, A.R.I.B.A. It is required to enable the public to book seats for concerts without having to pay entrance to the South Bank Exhibition which surrounds the Royal Festival Hall.

The site is that of the demolished Waterloo Station administrative building on the corner of York Road and the Station approach road, this being as near as possible to the Hall itself and easily accessible by the

public. On this site it was required not only to place a suitable Booking Office, but also to lay out the whole area in such a way as to make a suitable setting for the large Brewery Lion salvaged from the South Bank site, and to form as large an open garden area as possible.

In plan the existing pavement in York Road is extended to form a terraced forecourt leading to a covered area outside the ticket selling windows. This forecourt is bounded on one side by a hoarding screening the footbridge trestle and on the other by the brick and concrete plinth supporting the Brewery Lion. This





SERGEI KADLEIGH A.R.I.B.A.

East elevation. Scale 1/12"=1 ft.

plinth is an articulated extension of the Rest-room and is thus joined to the Ticket-Office.

The construction is of brick external walls partially rendered, breeze and plaster internal partitions, and wood joist boarded roof surfaced with bituminous felt. The wall containing the Ticket Office windows is framed up in timber on a brick plinth; externally it is faced with polished plywood surrounding the window

panels contained within a wide cement rendered frame, and internally with a built-in counter and fittings.

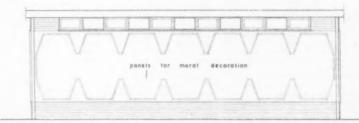
Visually the site is dominated by the Brewery Lion which His Majesty the King requested should be given a place on the Festival site. It thus forms a landmark in York Road opposite the main entrance to the South Bank Exhibition.

On the building itself the most interesting elevational

feature is the treatment of the external wall of the Ticket Office facing Waterloo Station. Here an attempt has been made to give added meaning to the building by incorporating the work of an artist-painter with that of the architect. The seven decorative panels which entirely cover this wall were designed and executed by Mrs. Lesbia Kadleigh, an artist who has made a special study of the relationship of the art of the painter to that of the architect. The designs which are carved into the rendered face of the wall, primed and painted in the normal way, represent the seven notes of the musical octave and were developed from the chromosome "dance."

Internally the Ticket Office contains a built-in counter with cupboards, cash drawers, and shelves, on the ticket window wall, and a special ticket storage unit, designed on the same principle as the storage units in in the Royal Festival Hall itself, built into the length of the wall opposite. The woodwork is painted dove grey with polished hardwood edging, the ceiling white, and the floor brown linoleum. The Rest-room contains a built-in hanging cupboard and sink-tea-making unit across one wall. The decorations are paint on plaster and the colour scheme is light sage green with a deep blue green.

The General Contractor was Richard Costain Ltd.



The designs are carved into the rendered face of the wall which is painted Indian red and white. Scale of drawing: $\frac{1}{8}$ " = I ft.



TEMPORARY BOOKING OFFICE ROYAL FESTIVAL HALL

Hostels.

Introduction

FOR present purposes Hostels can be defined as communal living-accommodation. A wide range of types of users, in very varying income groups are, therefore, included. It is not proposed, however, to include certain special types of hostels such as nurses' special types of nosters such as indexed homes, boarding schools or holiday hostels; these have already been included in "Planning," 6th edition (1950). The types of living-accommodation which are in fact one- or two-room facts each with representations facilities. flats each with separate cooking facilities, thus forming self-contained dwellings, have also been considered elsewhere and are now excluded.

There is an ever-increasing demand for hostels for various groups of the community; mostly they are needed for the unmarried or the widowed of all ages and almost all incomes, for old people and, in special circumstances,

for children

The main hostel groups are: I. Common lodging-houses for the

lowest income-group.

Hostels for very low income-groups.

Hostels attached to shops and works, mainly for lower income-

4. Local Authority and independent hostels, e.g., Y.M.C.A.s, mainly for students and low income-groups.

5. Independent hostels for middle income-groups.

Independent hostels for higher in-

come-groups.
7. Hostels for special types of workers, e.g., police, railwaymen, agricul-tural workers and mobile labour forces

8. Hostels attached to teaching institutions, e.g., university colleges and halls of residence.

Hostels for old people.
 Hostels for children.

Legislation

The principal legislation which affects hostel design and construction, apart normal byelaws or building regulations, is the Housing Acts of 1936 and 1949, the Public Health Act, 1936, and the Children's Act, 1948.

The Housing Act, 1936, through the operation of Section 57 and its Fifth Schedule, control the possibility of overcrowding by laying down minimum areas and distribution of sleeping

accommodation.

The Housing Act, 1949 (in Section 10) amends Section 6 of the 1936 Act so as to restore to local authorities the power to make byelaws for regulating the number of persons in houses let as lodgings or occupied by members of more than one family—which may be assumed to include hostels. Section 40 of the 1949 Act provides for National or the 1949 Act provides for National Exchequer assistance to local authorities towards the provision of "hostels"; the expression "hostel" is defined as "a building wherein is provided, for persons generally or for any class or classes of persons, residential accom-

modátion otherwise than in separate or self-contained sets of premises."
Old people requiring "care and attention" are, however, specially covered by Section 21 of the National Assistance Act. 1948

The Housing Act, 1936, in Section 72 gave power to local authorities to provide "housing" for the "working classes." "Housing" may be assumed to cover hostels but "working classes" is not defined or limited to any maxi-

mum income.
Part IX of the Public Health Act, 1936, controls all common lodginghouses and provides for the control to be administered by local authorities. Section 235 of this Act defines a common lodging-house as "a house (other than a public assistance institution) provided for the purpose of accommodating by night poor persons, not being members of the same family, who resort thereto and are allowed to occupy one common room for the purpose of sleeping or eating." The important words "poor persons" are not defined and it might be possible, therefore, to apply any requirements of byelaws made under the Act to other types of hostel, and even to cover normal "boarding-houses" occupied by persons of the lower income-groups; this might be most inconvenient to owners of hostels or boarding-houses in districts where the authorities have adopted byelaws based on M.o.H. Model Series III, as these include requirements such as that all walls and ceilings have to be limewashed in the first week of April and October and that all floors must be swept every day before 10 a.m. also sufficient towels must be supplied.

The Children's Act, 1948, places an obligation on local authorities to house and care for children of all ages who may be in need of assistance; thus the authorities have to find accommodation with foster parents or alternatively provide suitable hostel accommodation.

GENERAL CONSIDERATIONS

Types of Hostel

The first group mentioned above, common lodging-houses, often known as "doss" houses, cater for the lowest income-group: they should not be confused with public assistance institutions which provide for the destitute. Common lodging-houses are sometimes provided by local authorities, sometimes as private ventures and often by charitable organizations, such as the Salvation Army. The charges made for accom-modation are very low and consequently the facilities are absolutely minimum.

The second group, being for very low-income group users, are also of a very simple character providing how-ever, rather more privacy with better feeding facilities.

The third group is really a development of the living accommodation which in the past was provided for the

use of the apprentices and unmarried staff over individual shops. shops and factories, both in urban and rural areas, find that insufficient lodging accommodation is available in the district and therefore housing and hostel accommodation must be provided in order to obtain labour. Examples in this group may vary greatly in the quality of accommodation as they may have to cater for fairly wide ranges of income from trainees and apprentices upwards. The bulk of the users are, however, likely to be within the lower income-groups.

The fourth group caters for the same income-groups as the third type but the users are drawn from a wider field of employment; although, on the other hand, the variation in "ability-to-pay" may be less wide. Hostels of this type tend to vary greatly in size from 15 20 beds up to several hundreds. probable that this is the type most needed in all parts of the country and one which might, with advantage, be undertaken by local authorities as part of the housing needs of the country. far, however, it seems that local authorities have taken little advantage of their powers to provide hostels for clerical and skilled workers.

Groups 5 and 6 are generally similar to Groups 3 and 4 excepting that better facilities, amount of accommodation and greater privacy are provided, with a consequent increase in rents charged Separate bedrooms and bed-sitting rooms are generally required in these types, better furnishing and higher

grade dining and other service facilities. Group 7 includes a wide range of hostels for those who need certain specialised accommodation in connection with their work. The use made of this type of accommodation may be of a transient nature as, for example, where railwaymen and those for mobile labour teams are concerned. Few of the users are likely to be highly paid. Hostels for mobile labour are very badly needed in many towns owing to the shortage of lodgings which may be required only for short periods; the users are gener-ally skilled or semi-skilled persons who travel to carry out installations of

machinery, plant, etc.
Group 8 is made up of hostels for specialised uses, which are subject to local variations, often arising from traditions. The main feature which makes these hostels different is the demand for more space for quiet study than is needed in normal hostels and the fact that study-bedrooms may be required and be occupied for periods much longer than the normal hostel bedroom.

Hostels of all types usually provide accommodation for one sex only or have separate wings for each sex; exceptions are, of course, those for old people, and those hostels occasionally attached to factories or institutions employing

or providing accommodation for mar-ried couples. In most hostels occupied by a single sex, facilities are provided for visitors of the opposite sex in rooms

on the ground floor, usually near the entrance.

It seems generally popular and, in fact, desirable that hostels should not be too large, in order that they should be as homelike as possible and avoid the "institutional" character. It seems preferable, also, that they directly attached to individual shops and works, although frequently this has been unavoidable. Most hostel users prefer a change of company in their leisure times from those with whom they work during the greater part of the day. In larger cities and for more isolated establishments individual firms often have to provide staff hostels without which the necessary labour cannot be recruited for their shops, offices or factories; in some areas, however, the development organisation or estatemanagement company has operated hostels of various types which are made available to any employees of the firms in the area. Similar hostels may very well be needed in some, if not all, of the new towns.

In hostels for women, especially

In hostels for women, especially those of the less expensive types, much of the domestic work is carried out by the residents assisted by a relatively small staff who attend to the communal accommodation, and carry out the catering and cooking duties. Among women there is, in fact, a considerable demand for a type of accommodation which is little more than a series of small flats with some communal lounge space; these are hardly hostels and as borderline types are excluded from these

articles.

Hostels catering for men, on the other hand, usually provide full domestic service covering cleaning and cooking, and even clothes mending, although some of the less expensive establishments expect guests to make their own beds and help with the service of meals.

Hostels for old people are needed in greatly increasing numbers for almost every income group. At the moment much of this type of accommodation is being provided by the conversion of large houses and consequently few buildings for the purpose are being specially designed. This type often provides for housing both sexes and married couples in the same building. Local authorities are providing some hostels of this type but many are operated by charitable organizations or by private ownership, the last particularly for the higher income-groups, the accommodation and service facilities being more elaborate than in those provided for old people of the "working classes" under the Housing Acts.

The last group in the list (on page 516) concerns a hostel development which is likely to increase due to the operation of the Children's Act, 1948. In the past many such hostels have been provided by charitable organizations such as Dr. Barnardo's Homes although some have been local authority institutions. Here, again, at the moment, conversion of existing buildings, especially in rural areas, is likely to precede the erection of special buildings.

Sites

The type of site needed varies greatly with the particular sort of hostel under

consideration; there are however, certain points which are common factors for most sites. Proximity to public transport linking to places of work is of first importance; sometimes, as in rural or semi-rural factory hostels, it is possible to plan the living accommodation within walking distances. In common with all domestic property, hostels should be kept away from busy and noisy thoroughfares; this is specially important for hostels which may include among the users those who need to sleep during the day, such as policemen, railway workers and night-shift workers.

Traffic access is necessary to the service parts of all hostels for delivery of food, fuel and laundry and the collection of refuse, but in most types little other traffic access facilities are needed beyond the occasional car or ambulance at the main entrance.

Hostels for old people should be reasonably close to shops and to such recreational facilities as cinemas; while others, for children, should have easy access to schools and playing fields.

When hostels are planned in lesscrowded areas, it is desirable to include sufficient site area for a garden and for recreation, such as tennis, unless such facilities are already available in the neighbourhood, or at the places of work to which the hostels may be attached.

As most hostels are provided for those of lower income-groups it is important to avoid sites which are expensive either in first cost or in maintenance or in annual outgoings in order to keep down the rents to be within reach of the users.

Adequate public services such as drainage, water and power are essential except for a few very special schemes such as those for agricultural and forestry workers in very remote districts. Even in such districts a good water-supply is important.

Sites need not necessarily be level; good use may often be made of falls or half-levels for storage and similar accommodation. Where outdoor recreational facilities are provided, such as tennis, some reasonably level portions of the site are needed to avoid excessive installation costs; terraces attached to the buildings can be a great summer asset.

Aspect

As hostels are domestic buildings in continuous occupation for all seasons of the year, the aspects given to the various rooms should follow normal domestic allocations; living rooms and bed-sitting rooms should have positions such as will receive some sunlight even during the winter months. Less good aspects may be given up to kitchens, sanitary accommodation and storage. Games rooms may also be given the less sunny aspects, being mainly used during wet weather or in the evenings.

General Planning

Fig. 1 shows diagrammatically the relationships of the various parts of the accommodation; these general relationships are common to almost all types of hostel.

All rooms in common use should be grouped together and should be related to the main entrance and dining rooms should have easy access to the kitchens. Also in close proximity to the entrance should be any administrative offices and visitors' accommodation, if this is required. It is preferable that the common rooms are planned on the ground floor although some may be placed at lower-ground or first-floor levels. The dining room should be on the same level as the kitchens wherever possible. Sanitary accommodation should be calculated and planned having regard both to the common room accommodation on the lower floors and the sleeping rooms on the upper floors.

Except in hostels for old people, and possibly those for children, there need be no height restrictions. When there are more than four storeys, or perhaps five if the users are all young people, lifts should be planned. It is desirable that hostels for old people are limited to two storeys unless there is adequate lift-service. High buildings must have proper means of alternative escape. Staircases should be enclosed by fire resisting construction and the partitions which bound connecting corridors should provide a reasonable degree of fire-resistance.

The amount and quality of accommodation and incidental fitments are very closely related to the incomegroup from which the majority of users in each hostel are drawn, and some general notes on these usual standards follow.

Hostels of the "common lodging-house" type can be of the simplest character; of very robust construction hard-wearing and easing hard-wearings, Dormitories with cleaned surface finishings. are usual: in hostels for women the beds are sometimes curtained or otherwise screened to form cubicles. A combined day-room-dining-room generally provided. Meals are of the plainest type but they need to be available over long periods. In some hostels of this type the only cooking facilities provided are those for the users to prepare their own meals in a common kitchen, etc. Bathrooms and lava-tories are often provided on the ground floor or in a basement and should be planned reasonably near the entrance, Some form of baggage room is required near the entrance, in which users may leave personal property; such a room is usually fitted with lockable metal lockers which can be cleaned out easily and of a size suitable for a small suithaversack or portable bundle. Internal furnishings are of the simplest type constructed of materials which clean easily and do not show or suffer damage easily. Dormitories or cubicles should provide a minimum of 50 sq. ft. of floor area per person and about 400 cu. ft. of air per person. The day-room-dining-room space should be based on an allowance of about 10 sq. ft. per bed. It is essential to provide a sick room, preferably with it; own sanitary accommodation. In general, the sanitary accommodation should be associated with the day-room accommodation and the main entrance; some w.c.s and lavatory basins, however, are needed on the levels of the sleeping rooms.

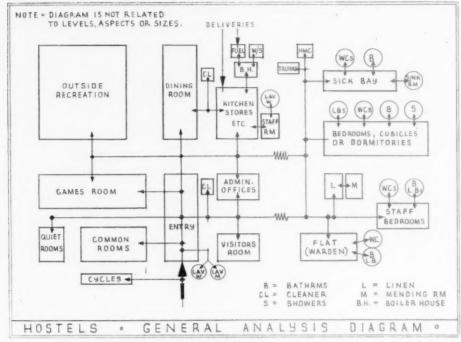


Fig. 1

Facilities for users to wash and dry clothes, etc., are essential and can well be grouped with the ground floor bathrooms.

Hostels for lower-paid workers also have to be very simple in character, to keep down the rentals or other charges which may be levied. Sleeping accommodation in such types generally is in the form of dormitories or large rooms containing up to six beds; the larger the number sharing a room the more economical can be the accommodation provided: thus the greater the privacy the higher the rent. Cubicles instead of open dormitories are often used but frequently only formed with curtains. The lower-income type of hostel tends to need more communal facilities in the shape of lounges, quiet rooms and games rooms as the bedrooms generally do not provide sitting or writing space; the occupants of this type of hostel also tend to go out less and may spend considerable leisure time at the hostel. As rentals increase there is not necessarily a corresponding increase in floor areas; the larger part of the difference, except for more privacy in bedrooms, is devoted to better furnishing and meals and more comprehensive service

The highest rental types may provide each tenant with a suite of two rooms, i.e., a bedroom and a sitting room and even a private bathroom. Many unmarried or widowed business and professional men and women are willing

to pay relatively high rents for what are virtually service flats with meals served in a communal dining room.

Hostels attached to factories and shops may require considerable variation in the type and quality of accommodation; in such schemes care should be taken to plan the high-priced accommodation where it is not disturbed unduly by noise from common rooms.

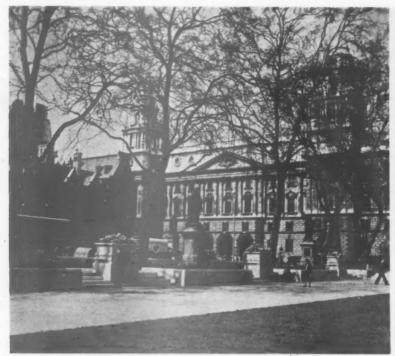
Hostels for old people present a number of quite different problems; the most important of which is that the users do not go out so much or so regularly and spend the greater part of the time in the hostel. Increased room areas are thus essential both for bedrooms and common rooms. Pleasant gardens, easily accessible, are specially important.

Collegiate hostels vary greatly in character and this is often due to local traditions. The majority of recent schemes provide for all meals, except snacks and sometimes teas, to be taken in a common dining-hall but in a few schemes students are given self-contained suites, sometimes sharing bathrooms and kitchens and only one main meal is eaten communally "in Hall." Hostels of this type now tend to provide single study-bedrooms for each student, although rooms for two are sometimes provided. The common rooms are often smaller and less in number than in other types of hostel as more time is spent by students in their own rooms.

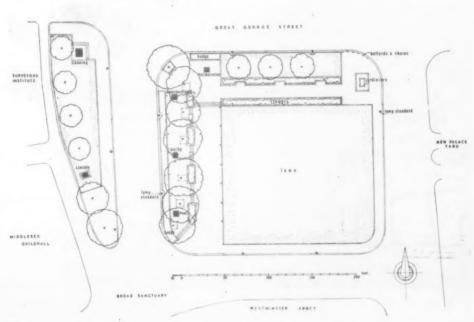
(To be continued next week)

BATH ASSEMBLY

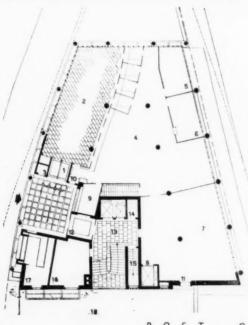
A pleasant architectural addition has now been made to the attractions planned for the Bath Assembly. It has been arranged that some private houses, some of them of moderate size and none normally open to the public, shall be open for the period of the Assembly to people who are visitors from outside Bath; the owners themselves will be in attendance to show their homes to their guests. The scheme is partly conceived so that overseas visitors can get a chance of seeing the interiors of British homes, but some of the houses are in any case of great architectural interest. For they include Lord Hylton's Ammerdown Park, a classic house by Wyatt, and Hinton Priory where there are remains of one of Somerset's two Carthusian priories and a Tudor house built out of the materials of the rest. There will also be Iford Manor, near Bradford-on-Avon, St. Catherine's Court, and three in Bath of which one will be Col. Jenner's important house at 9 The Circus; this last has been featured in Country Life. There may also be others in the scheme, and those finally in the list will be featured in the architecture exhibition (to be opened by Prof. Richardson) which is also to be an important part of the Assembly.



PARLIAMENT SQUARE IMPROVEMENTS Architect: G. GREY WORNUM, F.R.I.B.A.







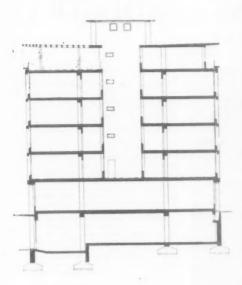


KEY: UPPER GROUND FLOOR

- I. Porch leading to Post Office
- 2. Public Hall
- 3. Telephones
- 4. Post Office workers

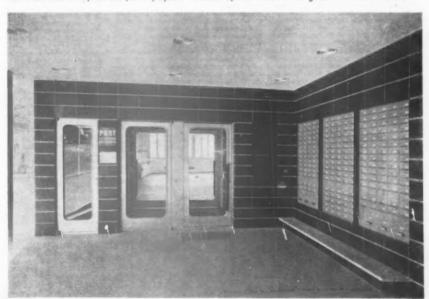
- 6. Deputy Postmaster
- B. Parcels lift from lower ground floor
- 9. Post Office boxes
- 10. Night counter 11. Postal matters in bulk
- 12. Porch leading to stairwell
- 13. Stairwell
- 14. Tools, etc.
- 15. Stairs to lower ground floor
- 16. Storeroom
- 17. Kiesk

IB. Drive





The post office is part of a building which also accommodates a number of commercial offices. On account of the slope of the ground, the building being at the junction of a rising and a descending street, there is an upper and a lower ground floor, one level with each street. The post office occupies these two ground floors, and offices the five upper storeys. The main entrance is at the upper ground floor level and separate entrances are provided from a common vestibule to the post office and upper storeys. The vestibule also leads on to public telephones, a night telegram counter and post boxes. Most of the lower ground floor is used for parcels post with loading bays for postal vans. The opposite side, the lower ground floor, which is lighted artificially, is used for lavatories, central heating plant, coal cellar, boiler and transformer. Heating pipes are buried in ceilings. Part of the roof storey has been converted into a roof terrace for employees. A detail of the windows was given in A Sheet No. 117



News of the BUILDING INDUSTRY

INTEREST

THE MINISTER OF LOCAL GOVERN-MENT AND PLANNING, Mr. Hugo Dalton, has given the British Portland Cement Manufacturers permission to work chalk and marl for the manufacture of cement at the Norman Cement Works, Cambridge, but has imposed a number of conditions to prevent unnecessary defacement of the countryside.

There is to be a tree-planting scheme and landscape scheme for the treatment of the marl areas. These are to be agreed between the company and the Cambridgeshire Counti. All plant and machinery are to be removed once they are no longer needed for the purpose for which they were installed.

In a letter conveying Mr. Dalton's decision, it is pointed out that he has had to consider the national importance of maintaining cement production. In the last twenty-five years the annual production of cement has increased from some 3,000,000 to nearly 9,500,000 tons, and the demand shows no sign of abatement. All future planning of the industry must reflect provision for an increasing output, and the securing of reserves of raw materials to provide a working life for cement works for up to 80-100 years is desirable.

Mr. Dalton's decision follows the holding

Mr. Dalton's decision follows the holding of an inquiry at Cambridge on January 11-12, 1951. Representations were made by the Cambridgeshire County Council and the Cambridge Borough Council. These authorities did not oppose the company's plans in their entirety, but advocated reductions in the areas to be worked and a limitation of the life of the Norman Cement Works to 25-30_

THE HOUSING SUMMARY presented on April 6 shows that the number of permanent houses completed in Great Britain during February was 13,984 compared with 13,150 in Januray.

The total number of houses completed under the post-war programme is now 1,005,798 (848,652 permanent and 157,146 temporary). During February homes were provided by

During February homes were provided by nessen who building, repair of uninhabitable houses and conversion for 14,767 families, compared with 14,112 in January and 16,749 in December. This brings the total number of families rehoused by these methods under the postwar programme to 1,289,826. This total does not include homes provided in service camps or requisitioned houses.

"THE THEATRE and Civic Entertainment" is the title of a pamphlet issued by the British Actors Equity Association, giving advice on the initial steps which local authorities can take to help the Theatre by acquiring and converting premises, by renovations and improvements and by equipping existing buildings.

Authorities are urged to make full use of the free services offered. Inquiries should be addressed to the Civic Theatres Organiser, British Actors Equity Association, Imperial Buildings, 56 Kingsway, W.C.2.

MR. C. H. NOTON, general sales manager of Fibreglass Limited has joined the Board as a Director.

ARCHITECTS, BUILDERS, SURVEYORS and estate agents attended a conference called by Mr. Edward Heath, Conservative M.P. for Bexley, on April 3, to discuss ways and means of producing more houses.

and means of producing more houses.

Mr. John Stevens, of a Woolwich firm of builders merchants, said his firm could get labour, materials and money to build 250



Mr. George A. Brown, M.P., who succeeds Mr. Stokes at the Ministry of Works

To encourage interest in technical education in London, the L.M.B.A. is setting up a trust fund, with a capital of £1,000, and allocating an additional £500 a year for the award of medals and bursaries to students at the various schools of building and technical institutes throughout the London area.

For many years past the L.M.B.A. has made donations to the prize funds of several of the schools of building. Now the Council has accepted a recommendation from the Education Committee, of which Mr. W. K. Laing is Chairman, that the grants be made on a wider, more consistent and permanent basis, and that they take the form of bronze and silver medals, diplomas and bursaries.

apionus and out-aries.
Following acceptance of the scheme by the L.M.B.A. Council, discussions are to be opened with the City and Guilds of London Institute and with the heads of the schools of building on the question of the subjects for which the medals should be awarded.



The suggested medals, designed by Mr. Cecil Thomas, F.R.B.S., incorporate the L.M.B.A. coat-of-arms on one side, with space for the name of the recipient and the subject of the award.

a year; all that was needed was authority to

Councillor Peter Relph, chairman of the town's housing committee, attacked the Government's insistence on the ration of four council houses to one privately built. Bexley, he said, had a waiting list of 4,500, of which a large proportion wanted to buy houses of a type private builders were willing to erect.

TWO NEW SECTIONS have been added to the Dry Rot and Woodworm Exhibition sponsored by the D.S.I.R., which began a

sponsored by the D.S.I.R., which began a second tour on April 18. The first section deals with sap stain, or "blue stain," which appear on some timbers, particularly softwoods, if they are left on the ground, or in sawn timbers not dried quickly enough. The second section illustrates the attack of pinhole borers which attack logs and unseasoned timber only. They are unimportant as peets of structural woodwork, joinery, plywood or furniture, but the pinholes are sometimes confused with exit holes made by lyctus or furniture beetles. This section will show how the holes can be easily distinguished.

distinguished.

So far ten locations have been fixed for the exhibition as follows: April 18-26, Belfast May 9-17, Greenock; May 23-31, Aberdeen; June 6-14, Dumfries; June 20-28, Huddersfield; July 9-14, Llandudno; July 18-26, Burnley; August 15-23, Exeter; August 29-September 6, Cardiff.

A REVISED FORM of application for import licence, ILB/A (revised), for goods other than vehicles, machinery, plant, scientific instruments and parts, is introduced by the Import Licensing Branch of the Board of Trade from April 23. The form provides that the applicant, in effect, completes his own form of import licence with two copies, and in approved cases, this will be validated as an import licence by the Board of Trade. The date of the issue of the licence will be indicated by a perforated device.

cated by a perforated device.
Whilst applications for licences on the old form of applications will continue to be accepted by the Board of Trade, it is hoped that importers will use the new form as soon as possible. Copies may be obtained from the Board of Trade, Import Licensing Branch, Romney House, Tufton Street, London, S.W.1 (telephone: Abbey 9080), or from all Regional Offices of the Board of Trade.

"THE BRITISH SAWMILLING CLASSI-FICATION OF TIMBERS 1951," issued by the National Sawmilling Association, 14 New Bridge Street, London, E.C.4, is now published (price 10s. 6d.).

lished (price 10s. 6d.).

The search for "new" timbers, occasioned by the shortage of dollar woods has resulted in the importation of many new species in the last few years.

the last few years.

The new publication provides a uniform system of classification and covers 2,600 commercial names of timber.

THE ATTRACTIONS OF APPRENTICE-SHIP in the building industry are to be brought to the notice of prospective apprentices by the L.M.B.A. which has organised a speakers' panel drawn from L.M.B.A. members and representatives of the operatives and foremen to address Youth Employment Committees.

GOOD, BAD OR INDIFFERENT?

No. 34-By A. FOREMAN

Wood flooring

I begin to wonder whether, with the possibility of more timber being available soon, there will be some relaxation which will permit of a return to the use of timber boarding and an increased use of wood blocks for domestic ground floors. It still seems that many householders prefer timber in living rooms as the easiest to deal with and the most pleasant especially now that carpets are so expensive. Even if timber boarding returns for ground floors it seems doubtful that endugh will be available for joists as well so it is important to consider carefully how best to use the boarding with solid under-floors formed by the surface concrete as this is in contact with the ground, even if laid on good hardcore, and thus liable to rising dampness.

It is of the utmost importance that there is some form of protection of the boarding and blocks against this possible rising dampness. Also, if battens are used for fixing the boards they must be properly treated against decay; we have all seen so many examples of awful failures arising from the bedding of plain sawn battens in concrete where they become damp and are unventilated.

There seem to be about five methods of constructing floors of this type as shown on the accompanying diagram. The method I prefer is shown in Method A as the battens are kept out of the concrete and can be more easily laid to a constant level. Method B is preferred by some as there is no air-space between the boards and the concrete and it also avoids the trouble of positioning carefully the floor clips and making sure they are not damaged before the battens are fixed. If the battens and undersides of the boarding are treated and, the damp-course is satisfactory I doubt there is much risk from the unventilated air space in Method A and the floor is more pleasant as it has greater resiliency.

Flooring Con base Flooring Batten. Con screed. D.P.C. Con base Flooring Nailable core D.P.C Con base Flooring DPC Batten Con base Flooring DPC Nailable core

All battens should be treated with preservative preferably under pressure

I do not much like Method C and E because in both one has to nail to concrete and personally I don't much like fixing to nailable concrete as small errors in mix may make the material either too hard for satisfactory nailing or it may be such that it does not hold the nails adequately. I have never solved the problem of reliable nailable concrete making but one day I may learn the answer. I think Method C is better than Method E, as the nails do not have to penetrate the d.p.c. which is also why I am always doubtful of the success of Method D. I think nailable concrete is hopeless as a base for fixing very narrow strip flooring especially if it is secret nailed and for this type of flooring I feel that a batten construction is essential.

There are quite a lot of materials which can be used to coat the concrete to form the d.p.c. They may be a mastic asphalt or a pitch mastic for which there are several B.S. for the different varieties but I think a good coating, preferably laid in two coats, not less than \(\frac{1}{2} \) in. thick of a suitable asphaltic bitumen or a coal-tar pitch may be relied on; the details of suitable types require very full description and it is best to seek the aid of a really reliable asphalt firm. It is most important that this coating is carefully applied to avoid missing any spots or getting patches which are too thin; care should be taken to cover adequately the junctions of the floor and walls and to connect to the d.p.c. in the walls. It is wise to turn up the coating on the walls to a level which is covered by the skirring.

covered by the skirting.

In my opinion it is essential that the battens, whichever method is used, are treated with a preservative and by a pressure method at that as brushing is not very effective except to touch up cut ends. There are many types of preservative available but I still prefer, for this purpose, creosote. It is wise also to treat the underside of the floor boards by brushing on an organic solvent preservative—don't use creosote here as it may bleed through to the surface especially at the joints. Preservation is messy to do but pressure treated battens can be bought which reduces much of the trouble; the cost is small compared with the cost of eliminating any trouble which

Battens should be at least 11 in. wide, and preferably 2 in. if timber supplies per-

mit, so that there is ample bearing and nailing space for the ends of two boards at heading joints. It is important to ensure that the top surfaces of the battens, when fixed, are level over the whole floor area as the concrete may easily be rough or slightly out of level.

If softwood is used it is most frequently

If softwood is used it is most frequently face nailed although secret nailing is to be preferred but hardwoods should always be secret nailed. To ensure tight joints after the building is complete narrow boards are essential but more important is to lay boards of the correct moisture content in a building which is reasonably dried out; this may mean waiting some time to lay the flooring but the longer the better. Good cramping is important but unless the moisture content is right and the building fairly dry, cracks will assuredly appear. The moisture content should be between 15 and 20, which may mean kiln drying; near the higher figure is satisfactory for softwoods where there are ordinary fires or normally unheated rooms but the lower figure is needed where there is central heating or continuous burning fires. Hardwood flooring or blocks need a moisture content of 12 to 14 which means the initial drying out of the building must have taken place. It is well worth waiting for this

is well worth waiting for this.

It may be that the use of wood block flooring may increase also but the problems and risks of this type of construction are more easily overcome as wood blocks are normally laid in a bituminous mastic which in itself forms a damp-proof course. It is of the utmost importance that the concrete base is really dry before blocks are laid, otherwise there is a great risk of the blocks lifting.

Block laying may look simple, but it is better to depend on firms specializing in this work as they have experience as to when the under floor is fit to receive blocks and in the selection of proper adhesives, but do be sure that the whole surface is adequately coated to form the

It is important that care is taken to provide proper access panels to any services laid under the floors. These access panels need proper support at the edges and should be fixed in position with cups and screws so that they are readily removable without damage to the floor.

ELECTRIC WATER HEATING

No. 4.—BUSINESS PREMISES

By J. Mortimer Hawkins

The immediate objective of this article is to consider hot water for toilet purposes, as distinct from hot water for space heating. Particular emphasis is placed on existing buildings which need provision in this direction, as well as those buildings being reconditioned; Giant blocks of offices are not dealt with.

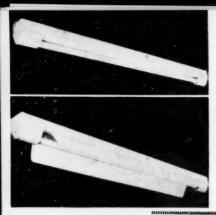
not dealt with.

Existing buildings all too often have inadequate supplies of hot water. Any increase in the facilities provided may involve structural alterations to provide boiler and fuelstorage accommodation. Such alterations may be difficult and expensive

to solve in themselves, apart, from the availability and cost of labour for main-tenance and stoking. The installation of flues for gas appliances may not always be feasible. Electric storage water heaters require no flues or other structural alteration and cuts in supplies of electricity make little or no difference to the availability of hot water stored in the tank. Moreover no danger arises when fuel cuts are restored.

are restored.

The type of water heater most appropriate to any given conditions is a matter for selection from a variety of standard (continued on page 525)



SERVICES. B1/11 LIGHTING

Two new fluorescent light fittings are illustrated here. The basic design is the same for both but the upper model is a bare light type while the lower one has reflectors fitted; the latter can be pierced to give some ceiling light if

pierced to give some ceiling light if required.
These fittings are designed to suit a new chosk which has no filling indexized sheet to the control of the c



The names and addresses of manufacturers of any item illustrated in MOSAICS, together with more detailed information relating to their products-including price and availability-will be forwarded to readers on request.

Letters should quote the serial number and be addressed to:

The Associate Editor The Architect and Building News,

Dorset House, Stamford Street, S.E.1. Please mark the envelope MOSAICS.



SERVICES. WATER HEATING

B6/2

Here is the 1951 version of a boiler just produced by a well known company. Basically similar to the 1950 model the new design is different in appearance and incorporates improvements which make for easier handling.

The fuelling hole is close to the front of the boiler and is fitted with a hinged cover plate and spring loaded filler plug which lift together.

The ashpit door is also spring loaded and foot operated by a pedal. The unit panel contains a thermostat setting dial below chermometer

Dimensions are: height (lid closed) 3 ft. 21 in.: (lid open) 4 ft. 6 in. Width: 1 ft. 9} in. Depth (base plate) 1 ft. 11 1 in. (ashpit door open) 3 ft. 04 in.

The boiler is designed for use with small or large domestic systems: with combined hot water supply and central heating systems: or with central heating only up to 200 sq. ft. of radiating surface including unlagged pipes



FITTINGS GAS COOKERS

A newly marketed gas cooker designed for the small flat at an economical price-£16 18s. 6d. The "Imp" has two boiling burners and a grill, beneath which is an 184 in. wide oven with drop type door. The finish is in cream vitreous enamel.

This cooker was shown at the Ideal Home Exhibition in the Gas Pavilion



PLANT. E3/14 BENCH TOOLS

This redesigned 2 in. motorised hydraulic tube bending machine has a totally enclosed power unit with a detachable top housing. The pump unit is driven by a & h.p. electric motor suitable for 220/230 volt single phase, 50 cycles supply or for 400 440 volc.

Patent take off arms are provided on the end formers so that the tube is automatically ejected on the return stroke.

DOUBLE LIFE FLUORESCENT LAMPS

Messrs. Thorn Electrical Industries recently announced the production of a double life fluorescent lamp. This important announcement follows a long period of research and testing which enables the firm to claim a life of 5,000 hours for their lamps. The 5,000 figure compares with the previously accepted life of 2,500 hours which, is understood, will be retained as the B.S. figure. The saving of replacement cost made possible by the higher figure is obvious.

Two problems, which have had to be overcome in perfecting the double life lamp are lumen maintenance and cathode

In support of their claim to have produced satisfactory lamp with a 5,000 hour life, Messrs. Thorn invited the technical press to inspect their factory at Enfield where the lamps are manufactured.

In this compact factory all the vital parts of the lamp, including the coating powders, end caps, cathodes, etc., are subjected to severe tests for ageing and general efficiency.

Special powders are prepared and refined on the premises, end caps are manufactured and much of the plant for making and assembling the various components of each lamp is designed and built in the factory.

As one illustration of the exactitude demanded in manufacture, the length of the finished lamp is gauged to 78/1000th of an inch and automatically rejected if it fails to satisfy this requirement.

During the visit a lamp was demonstrated which had satisfactory completed a life of 9,000 hours: this compares with the American Standard of 7,500.

It is of interest to note that, although efficiency naturally decreases as the life increases, the efficiency-decrease lessens progressively. It can therefore be stated that if a lamp is efficient after 2,500 hours the extension of life to 5,000 hours is worth

An illustrated description of the factory ill be published in a future issue of Factory Processes in the A. & B.N.

The new double life "Atlas" lamp is now the firm's standard product, and is produced in a range of colours and sizes,



equipment, ranging from the simple single point 1½-gallon non-pressure type storage heater to the 50-gallon Cistern type water heater whose job it is to feed multiple

OPERATIVE EFFICIENCY

The transference of heat energy from the electric element to the water is to all practical purposes 100 per cent.—it cannot be less, since the element is completely immersed in the water. Given good thermal insulation and thermostatic control, this provides an overall efficiency so high that it is cheaper to leave the equipment switched on continuously, in pre-ference to switching "on" and "off" ference to switching "on" and "off" morning and night. It follows, therefore, that load shedding over short periods has little or no effect. Indeed, to achieve control of maximum demand, many commercial and industrial organizations deliberately use their electric water heating as part of a buffer load, to be switched off at peak periods for the purpose of reducing maximum demand charges.

COSTS

Installation

1. Installation.
Because of Purchase Tax, which applies to water heaters up to 30-gallon capacity, it is in present conditions cheaper to buy a 50-gallon water heater than it is to buy a 30-gallon heater. For cost statements, therefore, Purchase Tax has been ignored this stage, to produce the following schedule:-

Average installed cost per gallon capacity	
£9 13 0 £5 6 8	
£4 0 0 £2 6 8	
£2 1 0 £1 18 0 £1 13 4	

These costs assume that cold water pipes exist at the point of location of the water heater(s)

2. Operating Costs.

These will be determined by the proper Insse will be determined by the proper selection of size and number of water heaters, e.g. whether in any given circumstances the capital and running costs of one 15-gallon heater with some pipe losses is more economical than three 5-gallon heaters with no nine losses (See sable in heaters with no nine losses (See sable in leases). heaters with no pipe losses. (See table in article 2.) It will also be controlled, of

course, by the amount of usage.

The London County Council have made a report* as a result of extended tests on the cost of operating 20-gallon electric water heaters in domestic situations, and these heaters in domestic situations, and these vary from 2.53d. per day for a family of three using 17.03 gallons per day, to 5.47d. per day for a family of four using 20.47 gallons per day.

The author can personally vouch for two other tests over extended periods, as

(a) A 11-gallon water heater in talled in his office premises.

has omee premises.

Duty—To provide hot water at 160° for washing for 10 technical staff—mainly at lunch and evening time.

Average cost per 24 hours (over 3 months' test)—2.47d.

A similar upit at home installed.

(b) A similar unit at home, installed over the sink.

Duty -Washing up, tea-making, cooking and small laundering, for a family of four.

Average cost per 24 hours (over 12 months' test)—2.3d.

Further tests have shown quite conclusively that it is cheaper to maintain the latent heat of the water than it is to allow the whole tank to cool off each night and then re-heat each day. This does not, of course, apply to longer periods, such as week-ends.

MAINTENANCE.

In most of the better known makes electric elements and adjustable thermo-stats are mounted on assembly baseplates.

Because of this maintenance is simple and cheap. Thermo-stats "plug-in" to position so that one suspected of faulty operation can be replaced in a matter of 60 seconds.

Depending on the hardness of the water and the temperature at which it is main-tained, furring will eventually take place in all types of water heater. De-scaling is more simple in electric water heaters than in most other types.

It is for the foregoing reasons that one finds an almost embarrassing rate of increase in the use of electric water heaters, especially so in those office and factory buildings where existing provisions are insufficient to meet the modern demands on this civilized

PLASTERING

No. 3.—By H. Andrews, B.Sc., A.R.I.C.

Standards of Quality

A MOST important stage in the prepara-tion of a Code of Practice is the adoption of standards of quality for the for the materials with which it has to deal. The is to refer to the appropriate British Stand-These standards demand minimum requirements from the material in respect of certain qualities which are considered essential for their satisfactory performance. essential for their satisfactory performance. All the most important plastering materials are covered by British Standards: B.S.890, for Building Limes; B.S.12, Portland Cement; B.S.1191, for Gypsum and Anhydrite Building Plasters and B.S.1198 for Sands for Plastering, and full use should be made of them. be made of them.

It should not be assumed, however, that a aterial which meets the requirements of the standard cannot behave unsatisfactorily It is here indeed where the Code of Practice implements the British Standard and enables the best possible use to be made of the materials.

Storage conditions

Unsuitable storage conditions subsequent to manufacture will adversely affect most materials. Some are affected more easily than others. Clearly gypsum plasters or portland cement stored under damp conditions will partially set so that their effectiveness is reduced. In extreme cases, they may become useless. Quicklime cannot be kept for long periods even under the best conditions as it deteriorates by air-slaking. Hydrated lime becomes lumpy in damp storage

A site operation is necessary before many materials can be used and if this is not correctly carried out the material may be spoiled or may become a potential source of trouble. An obvious example is quicklime. An incorrect slaking procedure or a too short maturing period may spoil a first-class lime; its volume-yield may be poor, its working qualities below normal and it may later give trouble by "blowing". Even the inevitable site operation of mixing a cementitious material with water may wrongly performed with undesirable effect on the plaster mix. A gypsum plaster left too long in contact with water before application will lose part or all of its effectiveness.

Mix Proportions

Even if all these pitfalls have been avoided the material may be incorporated in a wrongly proportioned mix or applied to an

and the sease of the subject are dealt with in the Code and recommended methods of storage, preparation and proportioning are given.

Craftsmanship

It would not be just to leave this section of the subject without stressing the essential craftsmanship of plastering. Good plastering requires good craftsmanship and this cannot be taught by a Code of Practice.

Types of Plastering Mix

There are many and varied mixes which can successfully be used for plastering but it is convenient to consider them in two

The first group is based on cement or cement and lime; the second on gypsum and anhydrate plasters or gypsum plasters with lime. The first group, based on cement or cement and lime shrinks appreciably on drying and, in this respect, differs from the second group which expands on setting but has little drying shrinkage. This difference in properties is reflected in the recommended manner of use. An undercoat containing cement and sand or cement lime and sand should be allowed to dry thoroughly before the next undercoat or the finishing coat is applied: this practice should be followed even if it is found that some wetting of the undercoat is needed to adjust the suction. If this thorough drying is not allowed the undercoat will continue to shrink after the plastering is finished and in shrink after the plastering is finished and in doing so it may set up stresses which result in cracking or failure of adhesion. Undercoats and finishing coats of gypsum or anhydrite plaster, on the other hand, may, and indeed should, follow each other as soon as practicable. It is this difference in properties, too, which makes gypsum plaster the most suitable material for finishing coats, whether alone or as an finishing coats, whether alone or as an addition to lime: mixes of cement or cement and lime have a tendency to craze or crack especially when given the smooth finish normally needed for plastering.

A further difference between the two groups is their ability to withstand damp conditions. Gypsum is to some extent soluble in water and for this reason the

[·] Copies available on request

group based on gypsum or anhydrite plasters should not be used where it is likely to be exposed to persistent dampness. Under such conditions it will weaken, soften and finally disintegrate. Cement mises or cement and lime mises or containing mixes or cement and lime mixes containing a proportion of cement at least equal to that of the lime behave very much more satis-

or the time behave very much more satisfactorily in damp positions.

Under normal conditions it is rarely necessary to use a mix containing cement but no lime. Such mixes are unnecessarily strong and during shrinkage they can pro-duce high stresses in the background to which they are applied or on a finishing coat applied to them before they are dry. The introduction of at least an equal volume of lime has considerable advantages. mixes are far more easily applied owing to the plastic nature of the lime and the lower ing of the strength and the rate of strength development is found to give less trouble from cracking.

Lime is also used in mixes based on

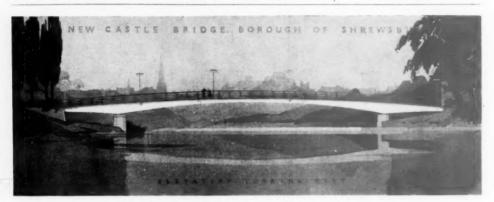
Lime is also used in mixes based on gypsum plasters mainly to improve their working qualities. It cannot be used with all gypsum plasters, however, as it tends to delay their setting unduly and it

should not be added to anhydrite plaster. From what has been said previously it is obvious that the improvement in the is obvious that the improvement in the working qualities of a plastering mix brought about by adding lime is greatest when the lime is in the form of putty prepared from quicklime and least when it is added as the dry hydrate.

Gypsum and anhydrite plasters must never be used in the same mix as portland

cement. They tend to react and produce compounds whose formation can give gross expansion and disintegration.

To be continued



CASTLE BRIDGE, SHREWSBURY

The contract for the construction of the first prestressed, post-tensioned, reinforced concrete, counter balanced cantilever bridge in the country has The contract for the construction of the first prestressed, post-tensioned, reinforced concrete, counter balanced contiever bridge in the country has been awarded by Shrewshury Borough Council to Taylor Woodrow Construction Ltd., on whose original conception the new bridge was designed, in collaboration with Messrs. T. P. Bennett & Son—consulting architects, and The Prestressed Concrete Co. Ltd. (London)—specialist designers. Messrs. L. G. Mouchel & Partners are consulting engineers. Work has been and the bridge is due from field to Reptember. The new bridge will replace the existing steel suspension footbridge, built 1910, which spans the River Severn. The new structure is a balanced cantilever, pivoted on the existing bridge piers which are 150 ft. apart, and has a centre 60-feet suspended span supported on roller bearings at the free ends of the balanced cantilevers. The cantilevers are balanced by counterpoise anchor blocks at each end

of the bridge.

The main or river span of the new bridge has its soffit following a parabolic arch with a rise of 6.65 ft. in 150 ft. span, which is equivalent to: 224 of the length. The overall thickness of construction at mid-span is 3 ft. and at the piers, from which the arch springs, the depth is 7 ft. 3 in., of which 3 in. is the deck slab

The anchor span at each end of the bridge has its soffit cambered to harmonize with the main span.

The deck of the bridge, which is 237 ft. long and 11 ft. 6 in. wide, is mainly a circular curve on elevation with a rise of 5.2 ft., which is 1:45½ of the length. The media of construction of the bridge is prestressed, post-tensioned, reinforced concrete, based on the Freyssinet system, with pre-cast reinforced

The media of construction of the bridge is prescressed, post-tensioned, reinforced concrete deck slabs.

The exterior elevation of the bridge and beam soffits will present a smooth face in natural colour. The top flange of the exterior beams, a projection 10 in. high and oversailing 6 in., forms a continuous band along the length of the bridge and serves for the lateral throw off of rainwater. This projection is designed to present in elevation a coloured band in blue faience.

TIMBER DRYING

In view of the present timber situation—in the face of which many timber and joinery firms can only work at a fraction of their capacity—the comments of Mr. N. C. McBran of C. W. Norris Ltd., joinery manufacturers are of interest. On a recent visit to the firm's works at Farnworth, nr. Bolton, Mr. McBran told the "Architect & Building News" that the inevitably low stocks not only tend to dishearten the workmen but mean that timber cannot be kept long enough in the yard. Nor is it possible to reject the less perfect specimens as was preciously the case. The shipping situation was a major cause of present difficulties despite earlier hopes that the Canadian "moth ball" fleet might have been put back in commission to assist in carrying timber. The defence programme does nothing to lighten the problems of the trade.

In the light of these comments the drying or seasoning of timber assumes even greater importance. The following notes are condensed from a paper given by W. C. Stephens M.A., A.M.Mech.E. to the East Midland Section of the Institute of Fuel in Lincoln. The paper is published in full in the May issue of the "Journal of the Institute of Fuel".

HE moisture that has to be extracted THE moisture that has to be eather in the from green timber is present either in the cell spaces (referred to as free moisture) or in the cell walls (bound or hygroscopic moisture). The moisture content of green wood on a dry-weight basis may vary between 50 per cent and 200 pe according to species, and usually there is more free than hygroscopic moisture present.

So-called "natural" or kiln-drying methods of seasoning normally employ air as the drying medium, and it is the free

moisture that first tends to evaporate from and leave the timber. At a moisture content of about 30 per cent, most of the mois-ture remaining in the wood will be hygroscopic moisture, the removal of which will cause the material to shrink.

Most timbers, particularly the hard woods such as oak, offer considerable resistance to the flow or diffusion of moisture to the surfaces, and hence there is always a tendency for the surfaces of boards or planks to dry in advance of the centre. A moisture gradient from centre to surface

is, indeed, necessary to maintain the vapourpressure differences required for a con-tinuous transfusion of moisture to the surfaces. A very steep gradient, however, would imply that the surface layers had reached a moisture content of 30 per cent. reached a moisture content of 30 per cent, the so-called fibre saturation point, and that hygroscopis moisture was being removed from that portion, with a consequent tendency to shrink. The moister core then resists shrinkage tendencies of the surface have seen that the series of the surface have the stress of the surface have surface layers, and internal stresses are induced. These stresses may develop to



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such an extent as to fracture or split the wood, and the art of seasoning therefore lies in the ability to maintain as steep a gradient as possible in order to promote rapid diffusion without permitting stresses to develop sufficient to split the material.

SEASONING KILNS

In a kiln designed for seasoning timber, means must be provided for controlling the rate of surface drying so as to minimize the risk of splitting, and this normally is accomplished by introducing a steam spray into the drying chamber. The air within the chamber usually is heated by suitably positioned steam pipes and the temperature controlled by regulating the steam flow through these

Finally, to provide heat and remove moisture from all parts of the timber the air must be kept constantly moving between the layers of boards of which the pile of

timber consists.

Air speeds of 2 to 3 ft./sec. between the rows of timber are considered satisfactory for the drying of all but wet, quick-drying softwoods, provided the pile width is no wider than about 7 ft., which normally is

The kiln chamber itself is usually built of brick with 9 in. solid or 11 in. cavity walls. The roof may be of 6 in. concrete with a cork, sand or sawdust layer added as extra insulation, and the whole is preferably covered over with another light roof to protect the kiln roof proper from the elements. The doors may be fitted at one or both ends. Kiln doors, are frequently a source of considerable heat loss when they do not fit tightly.

TIMBER SEASONING **SCHEDULES**

The seasoning properties of woods vary very considerably, and in general terms dense woods are more refractory and retentive of moisture than light, and hard woods than soft woods. Moisture also moves more readily along the grain than across it, and the resistance to movement in the direction of the annual rings is generally greater than in the direction at right angles to them. In short, it is virtually impossible to determine the most suitable drying schedule for such a heterogeneous material that will produce the fastest drying with a minimum of degradation, except by trial and error.

The Forest Products Research Laboratory
has devoted considerable research to the determination of suitable schedules for kiln-seasoning of commercial timbers: the results may be summarized as follows: Hard-wood temperature range is from about 100° to 130°F. in the green condition, to about 120°-160°F. during the final stages of drying. The temperature range for soft woods in the green is between about 130° and 150°F., and final temperatures may reach a maximum as high as 190°F. During the early stages of drying when the material is very prone to split, the relative humidity of the air is kept high and is of the order of 80-90 per cent. As drying proceeds the temperature is increased and the humidity lowered until finally the Hard-wood temperature range is from

the humidity lowered until finally the humidity is of the order of 40 per cent finally the schedules of temperature humidity are always given on a moisture-content basis and, owing to the variable nature of timber, there is really no definite answer to the off-repeated question: How long does it take for a piece of wood to dry? A reply such as "about 5 days for 1 in. thick soft wood, up to as much as 11 months for 4½ in. oak," though true, is sometimes regarded as being unnecessarily vague

It has already been pointed out that "seasoning" should imply more than "drying," and indeed in the seasoning of the thick oak referred to above a considershould able proportion of the total time is taken up in conditioning the timber so as to produce moisture uniformity throughout the section and relieve undesirable internal

Wood for indoor use in this country is generally dried to 12 per cent moisture content, in which condition it is roughly in equilibrium with the ambient-air conditions.

HEAT QUANTITIES

Steam-consumption figures will obviously vary quite considerably, but from tests in a well-built modern fan kiln 20 ft. in length, holding a load of some 500 cu. ft. of timber, it is estimated that the steam consumption when drying oak at the rate of about 2 per cent moisture content a day, at a temperature of 105°F. (40.5°C.), would be of the order of 80 lb./hr. The thermal efficiency of the operation at this stage of the drying, based on the heat intermal efficiency of the operation at this stage of the drying, based on the heat required for separating and evaporating the moisture, works out at about 20 per cent. In the final stages, particularly during the conditioning period, the rate of drying becomes so slow that the efficiency falls to or 2 per cent or even less. A soft-wood 2 per cent or even less. A soft-wood load in the same kiln, on the other hand might require 170 lb./hr. of steam to maintain an air temperature of 150°F. (65.6°C.). The drying rate, however, might well be of the order of 10 per cent a day,

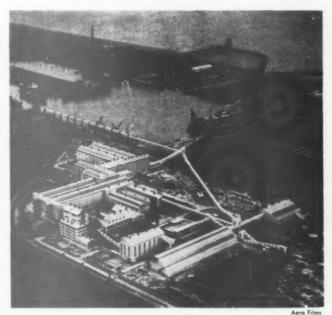
giving a thermal efficiency for the operation of 35 per cent. As the temperature is increased and the drying rate falls, the efficiency will likewise decrease appreciably.

FUTURE TREND IN TIMBER SEASONING

Many novel methods of seasoning or drying have been attempted—as, for example, drying in a high-frequency electrical field, drying in vacuo, etc.—but it usually is found that refractory timbers either refuse to part with their moisture at an economical rate and in the desired manner, or else in the parting the material is spoilt. It seems probable that the existing kiln drying methods will be employed by the timber trade for some time to come.

Some improvement in the efficiency of a commercial kiln can be brought about by increasing the heat-insulating properties of the building as a whole, and by ensuring that the air interchange is at all times at an absolute minimum consistent with proper control of the inside conditions. In this connection there is much to be said for the use of automatic control instruments that operate the air vents, before any demand

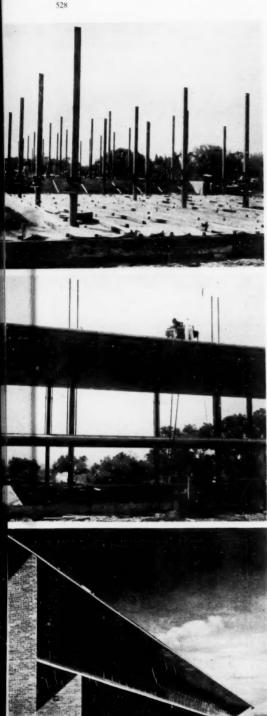
is made on the steam spray, to make good vapour deficiency in the air within the kiln. Research work also is being constantly undertaken to determine how best the drying rates of timbers may be increased without of the companying manufacture of the companying manufacture. without at the same time causing appreciable degradation to the material

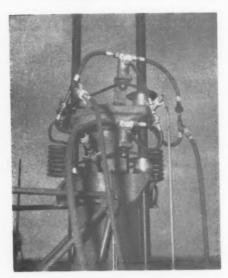


F. F. F.

Fisons Fertiliser Factory—the largest of its type—was opened on April 27 by Mr. Hervey Rhodes, Parliamentary Secretary to the Board of Trade.

The task of laying out the various buildings presented interesting industrial planning problems. The entire site had to be piled and the positioning of the buildings was largely dictated by the varying rises in elevations to suit different materials. Layout and construction will be described in a future issue of the A. & B.N.





One of the lifting jacks clamped to the top of a column. The threaded members which are attached to the "collars" (see text) rise through the "jack" lifting the floor slab.

THE UNIVERSITY "JACK" BUILT

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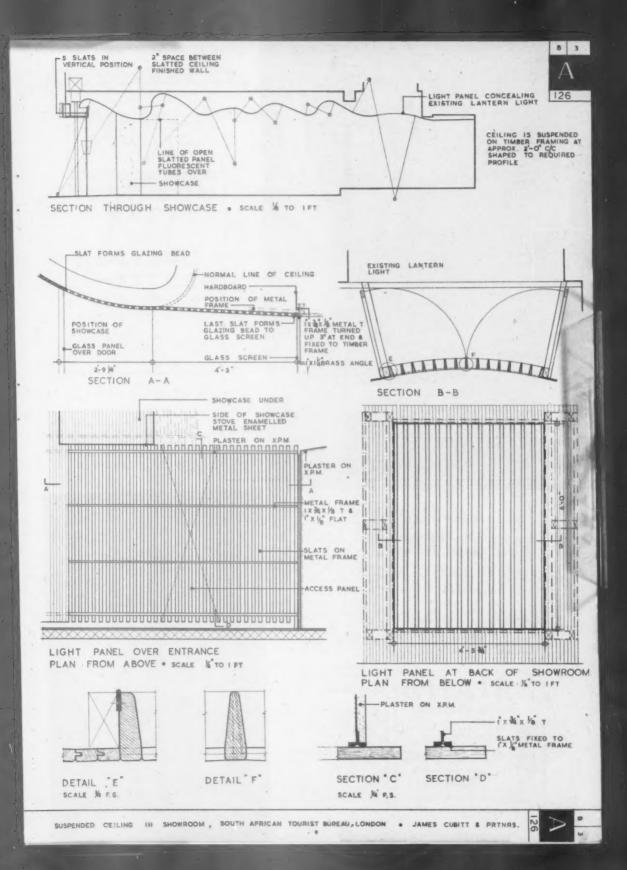
The Youtz-Slick method of building has been successfully used on the University Building at San Antonio, Texas.

The three pictures (left) show three stages in construction. Basically the system consists of casting ground and upper floor slabs at ground level, without formwork, around the vertical steel members shown in the upper photograph. These members carry sliding collars to which the upper floor slabs are secured. The collars ride on threaded verticals which pass through lifting jacks,

The base slab is poured first and allowed to harden. The first floor slab is then poured direct on to the base slab which is treated with a separating medium. Since the base slab acts as a bottom form only edge forms are required. The roof slab is then poured on the hardened floor slab. Roof and floor slabs are then jacked into position and the collars are welded in situ to the vertical members.

The centre picture shows floor and roof in position with the "jack" control unit on the roof.

The finished building has metal and glass curtain walls with solid stiffener walls.





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Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

· NEWS ·

OPEN

BUILDING

ABERAYRON R.C. (a) 6 houses at Cilias Aeron, 4 at Mydroilyn, 6 at Dihewid, 6 at Gilfach Rheda, 6 at Pennant and 8 at Talsarn. (b) Messrs, J. Owen Parry & Lewis, Arcade Chambers, Ammanford, (c) 1 Gn. (e)

ATCHAM R.C. (a) 40 houses with drainage, etc. at Ford; as one contract or multiples of ten. (b) Engineer and Surveyor, 24 St. John's Hill, Shrewsbury. (c) 2 Gns. (e) May 25.

BEDFORD B.C. (a) 152 flats in two contracts. (b) Borough Engineer, Newnham House, Horne Lane. (c) 3 Gns. (e) May 8.

BILLERICAY U.C. (a) Block of 15 aged persons' bungalows. (b) Council's Surveyor, Council Offices, High Street. (c) 2 Gns. (d) May 11.

BLOFIELD AND FLEGG R.C. (a) 40 houses at Thorpe-next-Norwich. (b) Messrs. E. Boardman & Son, Queen Street, Norwich. (c) 2 Gns.

BRIDGWATER B.C. (a) Block of 4 houses at Bath Road, block of 3 at Frederick Road and block of 3 at Fairfax Road. (b) Borough Engineer, Town Hall. (c) 2 Gns. (e) May 21.

BROMLEY B.C. (a) 18 flats. (b) Borough Engineer, Municipal Offices. (c) 2 Gns. (d) May 12.

BUNGAY U.C. (a) 5 pairs of houses on Hillside Road site. (b) Messrs. Buckingham & Berry, 10 Thorpe Road, Norwich. (c) 1 Gn. (e) May 21.

CHURCH U.C. (a) 8 bungalows, Lancaster Avenue. (b) Council's Surveyor, Council Offices. (c) 2 Gns. (e) May 12.

CLITHEROE B.C. (a) 2 pairs of houses, block of 7 bungalows and 3 blocks of 6 dwellings. (b) Borough Surveyor, Town Hall. (c) 2 Gns. (e) May 12.

DURHAM COUNTY POLICE AUTHOR-ITY. (a) Pair of police houses at Heighington. (b) County Architect, Court Lane. (e) May II:

EAST SUSSEX C.C. (a) Primary school, Rye. (b) County Architect, County Hall, Lewes. (d) May 8. (e) June 8.

ELSTREE R.C. (a) Maintenance depot and stores and block of 17 garages with drainage works etc., Boreham Wood. (b) Engineer and Surveyor, Shenley Road, Boreham Wood. (c) 2 Gns. (e) May 22.

*FROME U.D.C. (a) 11 houses. (b) B. H. Parkes, Surveyor, 22 Christchurch Street West. (c) 3 Gns. (e) May 11, Noon. See page 35.

GODALMING B.C. (a) Stores building, Borough Road Pumping Station. (b) Water Engineer, Branksome, Filmer Grove, Nightingale Road. (c) 3 Gns. (e) May 12.

HAYES AND HARLINGTON U.C. (a) 46 houses in pairs and blocks of 6 on Pinkwell Lane site. (b) Engineer and Surveyor, Town Hall, Hayes, Middx. (d) May 5.

address it is the same as the locality given in the heading. (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked & are viven in the advertisement section.



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***HEYWOOD B.C.** (a) Block of 4° maisonettes. (b) A. Middleton, Municipal Buildings. (c) 2 Gns. (e) May 19, first post. See page 36.

LEEDS C.C. (a) 60 flats (Contract No. 434); 14 houses (Contract No. 435); 24 flats (436); 10 houses (437); 22 houses and two-storey flats (438); 22 houses (439); 8 houses (440); 26 houses and two-storey flats (441); 20 houses and two-storey flats (442); 10 houses (426); (b) City Architect, Priestley House, Quarry Hill. (c) 1 Gn. each contract. (e) May 21.

LICHFIELD C.C. (a) 52 flats; 9 houses at Wheel Lane Estate; 3 houses in one block at Curborough Road Estate. (b) City Engineer, The Guildhall. (c) 3 Gns. (e) May 11.

LONDON—WANDSWORTH B.C. (a) 6 flats in 2 two-storey blocks. (b) Town Clerk, Municipal Buildings,. (d) May 9.

LONDON—WANDSWORTH B.C. (a) 3storey block of 12 flats. (b) Town Clerk, Municipal Buildings, S.W.18. (d) May 9.

MANCHESTER C.C. (a) Extensions and adaptations to Moss Side Fire Station. (b) City Architect, Town Hall. (c) 1 Gn. (e) May 11.

MOLD U.C. (a) 51 houses. (b) Council's Architect, Earl Chambers. (c) 3 Gns. (d) May 7. (e) May 28.

NORFOLK E.C. (a) Internal alterations, decorations, etc., at Morley Hall Residential Hostel for Maladjusted Children. (b) Chief Education Officer, County Education Offices, Stracey Road, Norwich. (c) £2. (d) May 9.

NORTHAMPTON B.C. (a) (Tender No. 8) 24 houses, (No. 9) 34 houses, (No. 10) 22 houses, at "Sunnyside," Harborough Road. (b) Borough Architect, Guildhall. (c) 2 Gns. (d) May 5. (e) May 28,

N. IRELAND—BELFAST C.C. (a) 8 shops and 8 flats, Taughmonagh Estate. (b) Housing Architect's Dept., 94 Chichester Street. (c) 85. (e) May 16.

N. IRELAND—LISBURN R.C. (a) (Group 1) 24 houses and 32 flats; (Group 2) 16 houses. (b) Messrs. Gamble & Maxwell, 5 University Terrace, Belfast. (c) 5 Gns. (e) May 22.

NORFOLK C.C. (a) 2 detached police houses, Downham Market; 1 standard police house, Hoveton; 1 standard police house, Earsham; 1 standard police house, Brooke; 1 standard police house, North Walsham. (b) County Architect, 27 Thorpe Road, Norwich. (3) May 16.

ONGAR R.C. (a) 14 houses in 7 pairs, Shelley Estate. (b) Engineer and Surveyor, Bowes Field, High Street, Chipping Ongar. (c) 2 Gns.

PENGE U.C. (a) 32 2-storey and 6 3-storey flats in 5 blocks, Trenholme Estate. (b) Council's Clerk, Town Hall, Anerley Road, S.E.20. (d) May 4.

PLYMOUTH C.C. (a) Alterations and additions to the Fire Station and Police Station. (b) City Architect, Seymour Road. (c) 3 Gns.

ST. AUSTELL U.C. (a) 3 pairs of bungalows, Mevagissey. (b) Engineer and Surveyor, Municipal Offices. (c) 2 Gns. (e) May 12.

ST. HELENS B.C. (a) 26 bungalows. (b) Borough Engineer, Town Hall. (c) 2 Gns. (e) May 21.

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SCOTLAND—MUSSELBURGH B.C. (a) 20 flatted houses and I shop, Newbiggin. (b) Burgh Surveyor, Municipal Offices, High Street. (e) May 28.

SEVENOAKS R.C. (a) 42 houses. (b) Engineer and Surveyor, "Inglewood," Oak Hill Road. (c) 2 Gns. (e) May 25.

SOUTH CAMBRIDGESHIRE R.C. (a) 18 houses, Melbourn site, or alternatively 10 houses and 8 houses. (b) Council's Architect, County Hall, Hobson Street, Cambridge. (c) 2 Gns. (e) May 21.

STAFFORD R.C. (a) 8 houses and 2 houses, construction of site services, including small sewage disposal works and pumping station, at Lea Heath. (b) Council's Clerk, Council Offices, 7 St. Mary's Grove. (c) 3 Gns. (e) May 17.

STRETFORD B.C. (a) Reconstruction and extension of Central Library, King Street. (b) Messrs. Howard & Benson, 88 Mosley Street, Manchester, 2. (c) 2 Gns. (e) May 22

TOTNES R.C. (a) 2 pairs of houses. (b) Council's Architect, The Council Offices, Higher Plymouth Road. (c) 2 Gns. (e) May 25.

TRURO R.C. (a) Public conveniences at Quay, St. Agnes. (b) A. J. Cornelius, 13 Lemon Street, Truro. (c) | Gn. (e) May 16.

WORTLEY R.C. (a) 4 shops and 4 flats. (b) Messrs. Husband & Co., 388 Glossop Road, Sheffield, 10. (c) 2 Gns. (e) May 15.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

BUILDING

†BILLINGHAM-ON-TEES U.D.C. (1) 80 houses. (2) Roseberry Road. (3) Stephen Coates Ltd., Langbaurgh Place, Middlesbrough.

BIRMINGHAM CORPORATION. (1) 100 houses, 106 houses, 97 houses. (2) Bartley Green and Shard End Estates. (3) Wates Ltd., 1258 London Road, Norbury, S.W.16. Geo. Wimpey & Co. Ltd., Castle Bromwich. G. Stubbings Ltd., Streetly Road, Birmingham, 23 respectively.

CARDIFF. (1) Maternity department. (2) Cardiff Royal Infirmary. (3) William Cowlin & Son Ltd., Stratton Street, Bristol. (4) £50,000. Architects: Sir Percy Thomas & Son, 10 Cathedral Road, Cardiff.

CO, DURHAM. (1) £300,000 factory. (2) Annfield Plain. (3) Turriff Construction Co. Ltd., Leamington Spa, for site foundation works. Architects: Napper & Taylor, 56 Eldon Place, Newcastle-on-Tyne. Promoters: Rnasome & Marles Bearings Co. Ltd., of Newark.

CRAWLEY DEVELOPMENT CORPORA-TION. (1) Site development works. (2) Northgate, in connection with New Town. (3) Holloway Bros. (London) Ltd., Millbank. S.W.I. (4) £119,379. Chief Architect: A. G. S. Fidler, Broadfield, Crawley, Sussex.



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DERBY CORPORATION. (1) 78 flats. (2) Mackworth Estate. (3) Geo. Wimpey & Co. Ltd., Chester Road, Castle Bromwich, Birmingham. (4) £86,113.

†DURHAM C.C. (1) Roads and sewers. (2) Framwellgate Moor housing site. (3) R. W. Bell & Co. (Builders), Ltd. Mistletoe Road, Jesmond, Newcastle-on-Tyne. (4) £29,856.

FORD (NORTHUMBERLAND). (1) Rectory. (3) Thomas Muckle & Sons, Bridge Street, Rothbury. Building licence still to be obtained.

HULL CORPORATION. (1) 60 three-storey flats. (2) Anlaby Road redevelopment. (3) J. Mather & Son, 15 De Grey Street, Hull.

LONDON COUNTY COUNCIL. (1) Blocks LONDON COUNTY COUNCIL. (1) Blocks containing 108 flats, 123 houses and flats. (2) Heath Park Extension. (3) S. R. Bryett, of Dagenham, Essex. (4) £306,195. (1) Extension of contract, blocks of flats. (2) Weir Estate. Wandsworth. (3) Rowley Bros. Ltd., Tottenham, N. (4) £77,950.

MIDDLESBROUGH C.C. (1) Adaptation. (2) Wykeham Hall, Totteridge. (3) Buckingham & Sons Ltd., 45 Vivian Avenue, Hendon, N.W.4. (4) £14,297.

MIDDLESBROUGH T.C. (1) 76 houses (2) Berwick Hills. (3) J. Oakley, Valley Road, Grove Hill Middlesbrough: 28 houses. George Wilmhurst, Gipsy Lane, Marton, Middlesbrough: 24 houses. W. J. Emmerson, Thoraton Street, North Ormesby, Middlesbrough: 24 houses.

NEWCASTLE-ON-TYNE C.C. (1) Alterations to No. 1 Tankerville Place, to accommodate 12 children and nursing staff. (3) G. L. Currie, 13 Balmoral Terrace, Newcastleon-Tyne. (4) £2,800.

NEWCASTLE-ON-TYNE C.C. (1) Children's home. (2) Longbenton Estate. (3) W. H. Oliver (Newcastle) Ltd., Shields Road, Newcastle-on-Tyne. (4) £4,146.

NEWCASTLE-ON-TVNE C.C. (1) Children's home. (2) Montagu Estate. (3) P. H. Oxnard, 301 Wingrove Road, Newcastle-on-Tyne. (4) £4,500.

OXFORD. (1) Nurses' home for Oxford United Hospitals. (2) Manor Road, Oxford. (3) A. C. Carter (Oxford) Ltd., Headington, Oxford. (4) £137,374.

SHEFFIELD E.C. (1) Primary school. (2) Eccleshall. (3) Ackroyd & Abbott, 47 Willoughby Street, Sheffield, 4. (4) £50,092.

SUNDERLAND T.C. (1) Cafeteria. (2) Seaburn. (3) Gordon Bell Ltd., Viewforth Terrace, Sunderland. (4) £2,500.

WALLSEND-ON TYNE B.C. (1) 100 houses. 50 houses. (2) Low Willington Farm Estate. (3) J. H. James, Archer Street, Wallsend. J. Armstrong, Low Willington, Wallsend.

WESTMINSTER, S.W. (1) General work on 80 flats and nursery school, for Westminster Housing Trust Ltd. (2) Tachbrook Estate extension. (3) G. E. Wallis & Sons Ltd., 231 Strand, London, W.C.2. (4) £136,918.

WORTHING E.C. (1) Primary school. (2) Goring. (3) Rice & Son Ltd., 23 Gloucester Place, Brighton. (4) £83,946.

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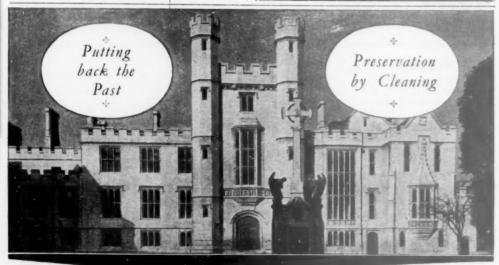
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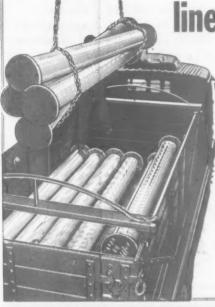
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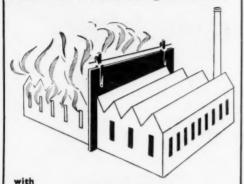
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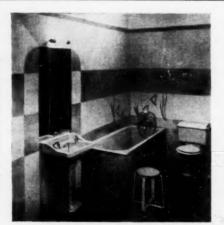
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APPOINTMENTS

LONDON COUNTY COUNCIL.

A PPLICATIONS are invited for positions of ARCHITECTURAL ASSISTANT (salaries up to £590 a year) in the Housing and Valuation Department. Commencing salaries will be determined according to qualifications and experience Engagement will be subject to the Local Government Superimanation Acts, and successful centifications of the Control of the Control

for vacancies.

Successful candidates will be required to assist the design, layout and preparation of working the design, layout and preparation of working the design. drawings for bousing achemes (cottages and multi-storey flats) and will be employed in the Housing

storey main) and will be employed in the riousing Architect's Division, forms of application may be obtained from the Director of Housing, The County Hall, West minister Bridge, S.E.I (stamped addressed coverlope required and quoise reference A.A.1). Canyasan, and disqualifies. (816).

MIDLOTHIAN COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

A PPLICATIONS are invited for the following vacancies on the Architectural Staff of the County Architect's Department:—

1. Vacancy—Salary A.P.T. VIII—685-760.
Candidates must be Associates of the R.I.B.A. and posseds a sound and wide knowledge of Housing and School Building.

2. Vacancy—Salary A.P.T. IV—2480-255.
Conditions must possess a sound knowledge of modern the must possess a sound knowledge of the preparation of working and be accustomed to the preparation of working and because the propagation of working and the details. details

ctalis.

3. Vacancy—Salary A.P.T. I—£390-435.

Candidates must be familiar with modern buildconstruction with particular emphasis on

using.

Applications, together with copies of two recent timorials, are to be lodged with the Subscriber later than 14 days from the date of insertion this advertisement, and it should be stated for which vacancy the application is submitted.

JAMES McBOYLE, County Clerk County Buildings, Edinburgh, 1 April, 1951.

EAST MIDLANDS GAS BOARD.

NOTES AND DERBY DIVISION

ARCHITECTURAL ASSISTANT.

A VACANCY exists for an ARCHITECTURAL ASSISTANT in the Divisional Drawing Office.

Derby.

Applicants should be near draughtsmen and have office experience in the preparation of working drawings, specifications, and quantities for industrial and commercial buildings.

The commencing salary will be according to experience and ability and within the range of 4450-4530 per annum. Grade A.P.T. VII of the National Salary Scales for the Gas Industry. The successful candidate will be required to pass a superior of the superior of the property of future.

Applications, stating age, qualifications, training and experience, together with the names of two referees, should be submitted to the undersigned not later than fourteen days from the publication

f this advertisement.

K. L. PEARCE, Divisional General Manager.

Notts and Derby Division,

5 Friar Gate, Derby.

9th April, 1951.

[536]

DEVON COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

A PPLICATIONS are invited for the undermentioned appointments on the permanent staff.

Conditions of Service and Salaries are in accordance with the National Joint Council Scheme for Local Authorities.

ASSISTANT ARCHITECTS.

Grade A.P.T. IX.

Grade A.P.T. VII.

Grade A.P.T. VIII.

Grade A.P.T. VIII.

Grade A.P.T. VIII.

Grade A.P.T. VIII.

The appointments are subject to the provisions of the Local Government Superanniation Act, 1977. and the successful candidates will be required to pass a medical examination Superanniation Act, 1977. and the successful candidates will be required to pass a medical examination of 25s. and for a period the successful candidates will be paid. for a period date, if married, if they bave to maintain a family in another home away from Exeter.

Application forms, with full particulars of qualifications and experience required for the various posts, may be obtained from the County Architect, 97 Heavitere Road. Exeter, and must be returned to him by Friday, the 11th May, 1951.

H.A. DAVIS, Circk of the County Council. The Castic, Exeter.

24th April. 1951. ace with the National Joint Council ocal Authorities.

ASSISTANT ARCHITECTS
Grade A.P.T. IX. (4750-4900 pc
Grade A.P.T. VII. (4685-8700 pc
Grade A.P.T. VI. (4595-6600 pc

COUNTY BOROUGH OF DONCASTER.

ESTATES AND HOUSING DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANT,

APPLICATIONS are invited for the appointment of ARCHITECTURAL ASSISTANT in the Estates and flousing Dynamassistant in the Estates and flousing Dynamassistant in the Estates and flousing Dynamassistant in accordance with Grider VI of the Administrative, Professional and Technical Division of the National Scales of Salaries, i.e., £995 per annum, rising by annual increments of £20, £20, and £25 to £600 per annum. Applicants should be Associates of the Royal Institute of British Architects, and have experience in housing, design and lay-out. The appointment, which will be an established one, will be subject to one month's notice in writing on either side, and to the terms of the Local Government Superannuation Act. 1937. The associated candidate will be required to pass a medical examination.

Applications, stating age, qualifications, and pre-ious experience, together with copies of three recent testimonials, should be forwarded to the un-signed not later than Friday, the 11th May, 19 Canvassing, directly or indirectly, will be

Canvassing, directly squalification.

H. S. ESSENHIGH, Town Clerk.

Priory Place, Doncaster.

1535

METROPOLITAN BOROUGH OF LEWISHAM.

APPOINTMENT OF ASSISTANT ARCHITECT

A PPLICATIONS are invited for the appointment A PPLICATIONS are invited for the appointment of an ASSISTANT ARCHITECT in the Borough Architect's Department. Salary scales, A.P.T. Division. Grade IV (£800 rising to £525 per annum). or Grade V (£820 rising to £525 per annum) according to the qualifications of the successful candidate. London Weighting varying between £10 and £30 per annum according to age is applicable to either salary.

Applicants should have passed the R.I.B.A. Intermediate Examination, or its equivalent at one of the recognised Schools of Architecture, and have had at least two yearn'y practical experience, or be a Registered Architect. Preference will be given to candidates who have had experience in the design and construction of municipal flats and housing schemes.

schemes.

The appointment will be subject to the Rules and Regulations of the Council from time to time in force relating to Officers; to the National Scheme of Conditions of Service: to the provisions of the Local Government Superannuation Act, 1937; to Local Government Superannuation due to either side; eministrate by one month's notice on either side; eministrate by comments and the Council Security of the C med cal examination by the Council's Medical

a medical examination by the Council's Medical Officer of Health.

Forms of application may be obtained from the undersigned, to whom they should be returned, accompanied by copies of not more than three recent testimonials, in an envelope endorsed "Assistant Architect." so as to be received not later than Saturday, 19th May, 1951.

Canvassing, either directly or indirectly, will be

ALAN MILNER SMITH, Town Clerk. ewisham Town Hall, Catford, S.E.6. 25th April, 1951,

CITY AND COUNTY OF NEWCASTLE UPON TYNE

CITY ARCHITECT'S DEPARTMENT.

A PPLICATIONS are invited from suitably quali-A hed persons for the undermentioned appointments in the Education Section of the Depart-

tent:—
(a) One SENIOR ASSISTANT ARCHITECT, salary £635 per annum, rusing to £710 per annum (A.P.T. Grade VII).
(b) One ASSISTANT ARCHITECT, salary £480 per annum, rising to £525 per annum (A.P.T. Grade IV).

Grade IV).

Applicants for the post of Senior Assistant Architect, Grade VII. should be Associates of the Royal Institute of British Architects, baving considerably applitude in the design and construction of contemporary buildings. Previous experience of educational buildings as desirable, but not essential. The work of the Section includes, in addition to the normal school programme, the design and crection of a large Grammar School and a new Central College of Technology. The successful applicants for both posts may be engaged wholly upon the new College of Technology. The successful applicants for both posts may be engaged wholly upon the new College of Technology. The successful applicants (Conditional Sina will adapted by the City Council; to the provisions of the Local Government Superanguation Act, 1937, and to one month's notice on either side. The successful candidates will be required to pass a medical examination. Applications, statung position applied for, age, particulars of training qualifications, experience, present and past appointments, together with copies of two recent testimonials and the names and addresses of two persons to whom reference may be made, should be addressed to the City Architect, 18 Coth Market, Newcastle upon Tyne I, not later than 18th Market, Newcastle upon Tyne I, and Louis Cambina Parket Parket Il Parket Description (Cambina Parket Il Parket Description In Parket Il Park

CAMBORNE-REDRUTH URBAN DISTRICT COUNCIL

APPOINTMENT OF QUANTITY SURVEYOR

A PPLICATIONS are invited for the appointment of QUANTITY SURVEYOR (Housing) in the Engineer and Surveyor's Department at a salary in accordance with A.P.T. Grade V of the National Scale of Salaries (8230-8270 per annuel.

Applicants should have had autable experience in the preparation of Jolis of quantities, measuring and valuation for mirerm certificates, and final salaries for work in connection with large bousing scheme.

cooling for work in connection with large housing chemes. The appointment is subject to:— (a) The National Scheme of Conditions of Service, (b) The Local Government Superannuation Act, 1937; and the passing of a medical examin-

ation, tel One month's notice in writing on either side. The appointment is, however, subject to the omission of the clause in the National Conditions of Service as to payment of subsistence for duties within the urban district. Applications, endorsed stating age, qualifications and experience, together with the names and addresses of two persons to whom reference can be made, should be forwarded to reach the undersigned not later than Saturday, 12th May, 1951.

to reach the understaned not later than Saturday.

21th May, 1951.

Candidates must alte whether to their knowledge
they are related to any member or senior office
of the Council.

Canvasaing, directly or indirectly, will be a disqualification.

C. WILSON. Cierk to the Council.

Council Offices, Camborne, Cornwall, 23rd April, 1951,

DUNDEE COLLEGE OF ART SCHOOL OF ARCHITECTURE. The Governors of the Dunder Institute of Art and Technology invite applications for the position of LECTURER AND STUDIO INSTRUCTOR.

Applicants should be members of the R.I.B.A and should preferably be holders of a degree or diploma of a recognised School of Architecture. Salary Scales—Men. £450 by £20 to £700; Women, £400 by £15 to £575, with placing according to qualifications and experience. These scales are at present under revision and the person appointed will benefit by any increase which may be decided upon. Applications should be lodged as soon as possible and should be on the prescribed form, copies sible and should be on the prescribed form, copies of which, with full particulars, may be obtained

from the undersigned.

J. CAMERON FREER, Clerk and Treasurer.

GOWER RURAL DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

A PPLICATIONS are invited for the following

APPLICATIONS are invited for the following appointments:—

(a) SENIOR ENGINEERING ASSISTANT Grade A.P.T. VI (2695-6660) per annum).

(b) SENIOR ARCHITECTURAL ASSISTANT Grade A.P.T. VI (2695-6660) per annum). Applicants for (a) should be either Corporate Members of the Institution of Civil Engineers or holders of the Testamur of the Institution of Municipal Engineers, and preferably holders of a University Degree in Engineering, Experience in Sewerage and Sewage Disposal is essential. Applications for (b) should be Associates of the Royal Institute of British Architects, and have had experience in Municipal Housing Schemes. Shops, Adaptations, Estimating and Supervision of

Shops, Adaptations, Estimating and Supervision of

Works,

The appointments are temporary ones for minimum periods of three years, and will be terminable by one month's notice in writing on either side. The appointments will be subject to the provisions of the Local Government Superannuation Act. 1917.

Housing accommodation will be provided if necessary

necessary:

Applications. endorsed "Senior Engineering Assistant" or "Senior Architectural Assistant." stating age, experience and qualifications and accompanied by copies of not more than three recent testimonials, should be delivered to the understance not later than Wednesday, the 23rd May, 1951.

H. K. NEWCOMBE. Clerk of the Council. Council Offices.

E. Uplands Crescent, Swarsen. [540]

BOROUGH OF CHATHAM.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ADDITIONAL STAFF.

APPOINTMENT OF ADMITTIONAL STAFF.

APPLICATIONS are invited for the following appointments in connection with redevelorment of the staff of the staf

CARDIGANSHIRE COUNTY PLANNING COMMITTEE

APPOINTMENT OF PLANNING ASSISTANT.

A PPLICATIONS are invited for the post of planNING ASSISTANT in the County Planning Department at a salary in accordance with A P.T. Grade V (#530-#570).

Aprile of the plant of the T.P.I. R.I.B.A.
R.I.C.S. or equivalent examination, should be experienced in the preparation of Development Plans and Planning Surveys and experience in the supervision of staff is essential. The appointment will be subject to

be subject to:i. National Joint Council Conditions of Serv

I. National Joint Council Conditions of Service.

il. The provision of the Local Government Superamination Act. 1937.

iii. The passing of a satisfactory medical iv. One month's notice in writing on either side. Applications should give particulars of ace, education, technical training, qualifications, experience, present salary, present and previous appointments, which together with the names of two referees must reach the undersigned not later than noon on Saturday. 26th May. 1951.

J. F. R. CARSON, Clerk of the County Council, Cambrian Chambers, Aberystewth.

20th April, 1951.

LONDON COUNTY COUNCIL.

A SSISTANT QUANTITY SURVEYORS required A SISTANT OUANTITY SURVEYORS required in the Housing and Valuation Department-commencing salary up to £580 a year (basic) according to qualifications and experience. An addition of 10 per cent is at present payable. Duttes include assisting in the management of housing contracts of considerable value, interinvaluations for payments, measurements of variations and settlements of considerable value, interinvaluations and settlements of considerable values of the payments of variations and settlements of considerable values of the payments of variations and settlements of considerable values of the payments of variations and settlements of variations and valuer. County Hall, S.E.I. Stamped addressed envelope required. (Quote QS/33). (486). [5189]

LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT

BUILDING SURVEYORS.

APPLICATIONS are invited for positions APPLICATIONS are invited for positions of TECHNICAL ASSISTANT (salaries up to £500 pius 10 per cent. addition) to deal with the technical administration of statustes relating to adrey precautions in buildings licensed for public enternament. Candidates should have a knowledge of building construction. Positions superannuable and carry displicitly on merit for permanent appointment of the property of the propert ment and promotion. Application forms, to be re-turned 19th May, 1951, obtainable from Architect to the Council, County Hall. S.E.I. enclosing stamped addressed foolscap envelope and quoting

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MENTS IN WALES AND MONMOUTHSHIRE: JUNIOR INVESTIGATOR The Civil
Service Commissioner invite amplications for a ner-

OSISKE JUNIOR INVESTIGATOR. The Civil Service Commissioners invite applications for a per-namental appointment as Junior Investigator. Safety Self-ed (for men) Junior Investigator, 2350–670, and sometiment of the commission of

distills mind we are sense of years of sense on its April, 1956 and solution with the sense should normally have a first or second class. Honours degree, but candidates without this sussification may be admitted if otherwise exceptionally well qualified. They must have knowledge of the history of Architecture, the history of Anniled Art, or the archaeology of Britain. Other things being equal, preference will be given to We'sh speaking candidates.

Particulars and application forms from the Secretary, Civil Service Commission, Buttington Gardens, London, W. J. quoting No. 40.21/51. Completed London, W. J. quoting No. 40.21/51. Completed [195]

LONDON ELECTRICITY BOARD.

ASSISTANT QUANTITY SURVEYORS.

A PPLICATIONS are invited for the above posi-tions in the Construction Branch of the Chief Engineer's Department at Lesco House, Stamford Street, S.E.I.

Engineer's Department at Leson House. Stamford Street, S.E. 1.

Applicants should be experienced in the preparation of Bils of Quantities in all their stages, measurement of Variations and re-measurement of contracts, and will work under the direction of a Chartered Quantity Surveyor.

The posts have been graded under the National Joint Board agreement of the 17th February, 1950, as Grade 5 (Schedule C)—safary range; 6607 198, 0d to £814 16s. 0d, per anum inclusive, the commencing salary being deependent upon qualifications and experience. This grading is subject to the approval of the District Joint Board and confirmation by the National Joint Board.

Application forms obtainable from Establishments Officer. 46 New Broad Street, E.C.2, to be returned duly completed within 10 days from the appearance of this advertisement, Please enclose addressed foodscap envelope and quote ref.: ESTIV/1216/AA on envelope and all correspondence.

CARSHALTON URBAN DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT,

A PPLICATIONS are invited for the appointment of an ARCHITECTURAL ASSISTANT in the Engineer and Surveyor's Department at a salary within Grades A.P.T. III-IV of the National Scales, plus London "Weighting." The commencing salary will be fixed according to the experience and qualifications of the successful applicant. Applicants must be engaged on a course of study lasting the experience and additional control of the successful applicants.

leading to a recognised architectural qualification preference will be given to candidates holding Intermediate Examination Certificate of the B.A. They must also be good draughtsmen have had a sound training in architectural

work. The appointment will be subject to (1) the pro-visions of the National Scheme of Conditions of Service, (2) the passing of a medical examination for superannuation purposes, and (3) one month's notice on either side.

The Council cannot provide the successful appli-

The Council causion provide the accession appo-cant with beasting accommodation.

Applications, on forms obtainable from the undersigned, must be returned, together with the names of three referees, not later than the 28th May, 1951. Canvassing in any form will be a

May, 1951. Canvassing in any form will be disqualification. WRIGHT, Clerk of the Council. District Council Offices,
The Grove, Carshalton, Surrey, April, 1951. [54]

E5418

ARCHITECTURAL APPOINTMENTS VACANT

A RCHITECTURAL Amintant required A RCHITECTURAL Amistant required immediately Must have up-to-date experience of the design of large industrial buildings and office blocks and be fully conversant with local authorities' requirements and by-laws. Knowledge of steel and concrete framed surveiver essential. Also ability to prepare specifications ready for quantity surveyor and tender Salary 625 p.a.—Apply in writing, stating age, experience, etc., marking envelopes. "Architect," to Personnel Manager, Metropolitant-Vekers Electrical Co. Ltd., Trafford Park, Manchetter, 13.

CREMENT 17. [534]
A RCHITECTURAL Assistant with office experience near required for vacancy in North West practice. The post is a permanent one with site responsibility, varied experience, and has prospects for a suitable man. Applicants should state details of experience.—Harry S. Fairhurst and Son, 55 Brown Street, Manchester, 2.

SITUATIONS VACANT

EXPERIENCED Engineering Draughtsmen required by large Company specialising in factory-made buildings for home and overseas. Ability to prepare production drawngs for manufacturing purposes exential. Knowledge of structures an advantage.—Reply with full details, experience and qualifications, to General Manager, Hawksley Constructions, Gloucester.

QUANTITY VANTITY Surveyon' Assistants required. Senior and Junior Taker-off, South Eastern pro-ncial town, temporary or permanent, State age, preference and salary required, in confidence to ox 1211. The Architect and Building News, 15309

DRAUGHTSMAN-Senior wanted for Architec-tural Department of Newcastle engineering firm. Knowledge of industrial building work essen-tial. Write, tasting age and experience, to Box 1219. The Architect and Building News. [5410]

REQUIRED by Reinforced Concrete Company, Sarics Assistant to operate in South Wales and West of England flussed on Bristoth. Salary offered, 1400-5400 per annum, according to qualifications—Applicants must have sound knowledge of septeral reinforced concrete application to industry—Write, giving full details, to Box B.869, at 191 Gresham House, E.C.2.

SITUATIONS WANTED

A R.I.C.S. (Bidg.). M.R.San.1., 33. ex-Sapper Capt.: estates surveyor to rural authority: experience land and building surveys: planning and byelaws procedure. Specifications, estimates, contract supervision and certificates. Seeks responsible when Country appointment. Car available. — Box 6005. Scotts. 9 Arundel Street London W.C.2.

CONTRACTS

FROME URBAN DISTRICT COUNCIL.

TENDERS FOR PERMANENT HOUSES. SCHEME 6.

invited for the erection of 11

TENDERS are invited for the erection of 11 Traditional Tyne Houses on the Rossiters Road Site, Frome.

Specifications. Bills of Quantities. Conditions of Contract and Form of Tender may be obtained on applications to Mr. B. H. Parkes, Surveyor, 22. Christchurch Street West, Frome. on payment of a deposit of \$3.5s., which will be refunded on receipt of a bonn-fide tender nor subsequently withdrawn and the return of all documents.

Plans are available for inspection at the office of the Surveyor, 2.

Plans are available for inspection at the office of the Surveyor,
Tenders, on the prescribed form, enclosed in a plain envelope endorsed "Tender for Housing," and bearing no mark to indicate the senders, must be delivered to the undersigned not later than 12 noon on Friday, the 11th May, 1951.
Contractors must satisfy the Council that they have sufficient labour to make an effective start and carry out the work.
The Council do not bind themselves to accept the lowest or any tender, and reserve the right to accept the whole or any part of a tender.
The acceptance of a tender is subject to the approval of the Ministry of Local Government and Planning.

Planning.

C. J. BARRINGTON, Clerk of the Council.
Public Offices, Frome, Somerset.
23rd April, 1981
[53] 15317

BOROUGH OF HEVWOOD

ERECTION OF MAISONETTES.

TENDERS are invited for the erection of ONE BLOCK OF FOUR MAISONETTES on the corner of Waterfold Lane and Lord Street, Heap corner of Waterfol Bridge, Heywood,

Bridge, Heywood,
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of Tender and General Conditions of Contract, may
be obtained from A. Middleton, B.Sc., A.M.I.C.E.
upon payment of a deposit of two guineas, which
amount will be refunded on receip of a bona-fide
tender and the return of all documents.

Sealed tenders, endorsed "Maisonettes," must be delivered to the undersigned, not later than the first post on Saturday, 19th May, 1951.

The Corporation do not bind themselves to accept the lowest or any tender.

W. R. PARKER, Town Clerk.

Municipal Buildings, Heywood.

24th Apr I, 1951

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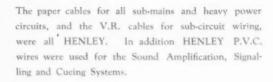


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